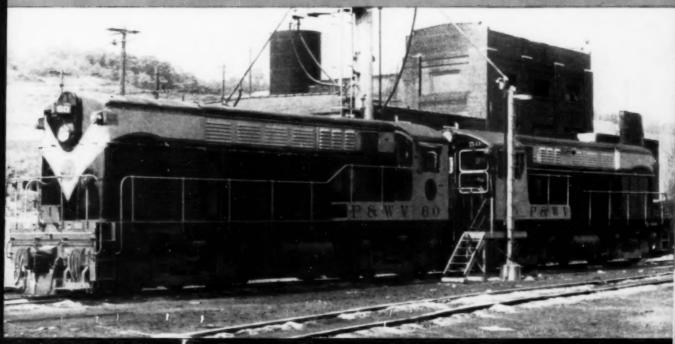
Why Unity's Imperative On Work Rules Issue-p. 42

November 9, 1959

RAILWAY AGE weekly



P&WV report -- composition shoes are a hit



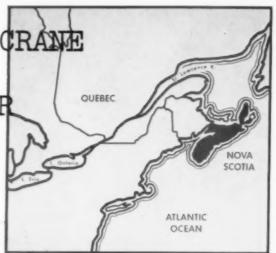
Concrete

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test sections soon

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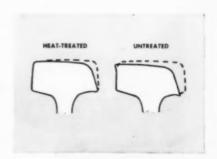
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What top PRR change meansp. 9

The Pennsylvania's announcement of a switch in its top management left a lot of questions unanswered last week. In an interview with Railway Age on the day he assumed his new job, PRR President Allen J. Greenough gave some of the answers. Here's what he had to say.

Rules proposals arouse unionsp.10

Reaction of labor leaders to management's demands for sweeping revisions of working rules has ranged from bitter to mild. BLF&E President Gilbert says the carriers want to maintain "record profit levels" by "shoving thousands into unemployment lines." BLE President Brown thinks the proposals "could have been worse."

How to reduce crosstie costsp.18

Several areas of potential savings-including standardization—were explored at the recent convention of the Railway Tie Association in Cincinnati.

Cover Story—RRs plan concrete-tie testsp.20

Proponents of concrete crossties say they'll last longer and cost less to maintain than wood ties. Tests planned by the Seaboard and the Coast Line will be watched closely by the industry.

Cover Story-P&WV likes composition brake shoesp.26

Among other advantages, says the road, composition shoes last four times longer than metal shoes. All P&WV locomotives are now equipped with composition shoes. The changeover required close cooperation between the operating and mechanical departments.

New consolidated code readyp.34

Here's a rundown on the new Consolidated Code of Operating Rules 14 western roads are adopting Dec. 1. Technological improvements have resulted in a number of changes. For one thing, the engine crew rules no longer mention the job of locomotive fireman.

The Action Page—Why unity's imperative on rules issuep.42

The present working rules in the railroad industry are as out-of-date as a horsedrawn buggy. The rules can, and must, be changed by railroad men themselves-management and unions. Only by such unity can the industry's traffic, and employment possibilities, be protected.



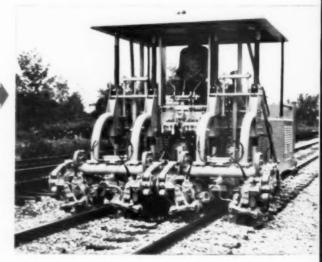
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Week at a Glance CONT

Current Statistics

Operating revenues	
9 mos., 1959\$	7,391,129,587
9 mos., 1958	7,013,191,462
Operating expenses	
9 mos., 1959	5,807,048,048
9 mos., 1958	5,613,195,989
Taxes	
9 mos., 1959	792,949,896
9 mos., 1958	685,984,463
Net railway operating	income
9 mos., 1959	548,669,818
9 mos., 1958	448,671,909
Net income estimated	
9 mos., 1959	393,000,000
9 mos., 1958	353,000,000
Average price railroad	
Nov. 4, 1959	104.36
Nov. 3, 1958	99.14
Carloadings, revenue 1	
43 wks., '59	25,624,208
43 wks., '58	24,901,471
Freight cars on order	
Oct. 1, 1959	35,626
Oct. 1, 1958	24,982
Freight cars delivered	
9 mos., 1959	29,916
9 mos., 1958	34,664

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Short and Significant

Railroads suffered two defeats at the polls . . .

in the East last week. New York voters approved an amendment (opposed by the State Association of Railroads) authorizing transfer of the 527-mile New York Barge Canal system to the federal government. New Jersey voters rejected Gov. Robert E. Meyner's plan (supported by the state's railroads) to divert New Jersey Turnpike surpluses to commuter aid.

New Jersey railroads met Nov. 6 . . .

to consider the next move in their acute problem of commuter-service deficits. Their topic: other possible alternatives to service abandonment. Also stressed: appreciation of the fact that over 600,000 of New Jersey's voters were on their side.

C&O has started Railvan service . . .

on Trains 14 and 15 between Grand Rapids and Detroit, Mich. Two combination rail-highway vehicles will make the 304-mile round-trip daily except Sunday. C&O's first regular Railvan service began last May between Grand Rapids and Traverse City. Further expansion of the operation, to include other system points, is under study.

September's estimated net income . . .

of Class I railroads was down \$43 million from last year—\$30 million compared with \$73 million for September 1958. The AAR statement also shows that the estimated net for this year's first nine months was \$393 million, up \$40 million from the \$353 million reported for the same period of 1958. Rate of return for the 12 months ended with September was 2.98%.

Latest reported beneficiary of the Seaway . . .

is the Venezuelan oil industry, which just landed a 55,000-bbl cargo of crude at Fort William, Ont. The shipment is admittedly a test operation, but it brings foreign oil almost to the very edge of Canada's own oil fields, whose proprietors are described as raising "loud outcries."

Nearly \$17 million in unemployment benefits . . .

went to railroad employees furloughed by the steel and copper strikes up to mid-October, according to Thomas M. Healy, management member of the Railroad Retirement Board. The AAR, meanwhile, estimates that the railroads as of Nov. 1 had lost 2,495,000 carloads of revenue freight as a result of the steel strike.



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What Top PRR Change Means

At 9 o'clock last Monday morning Allen J. Greenough began his first full working day as president of the Pennsylvania Railroad. At 10 o'clock he sat down with Railway Age Executive Editor Joe W. Kizzia and Publisher Robert G. Lewis to talk about his new job.

Q. Mr. Greenough, there's speculation in the industry about the exact role you will fill here, as president and chief administrative officer, while Mr. Symes retains the role of chief executive officer and chairman of the board. How will this operate on a day-to-day basis?

A. It's a little early to give you a complete answer. We've only had one brief meeting so far. Generally speaking, Mr. Symes, as you know, has to spend a great deal of his time with policy matters, and he's also been very active in seeking answers to industry problems. Under this new setup he will continue those things while I will be concerned with the day-to-day administrative duties of running the railroad. It's a case of dividing up the work load.

Q. Your arrangement, then, will be roughly similar to that which General Motors established after Harlow Curtice retired?

A. Yes, quite similar to that.

Q. When the Board of Directors announced these changes, they called them "a further development of the road's management organization." Where does this program go now?

A. This about completes it. We started in 1955 by setting up our regional organization, with the nine regions, and made some further changes early in 1958. This rounds it out.



PRR President Greenough as he assumed his new job last week.

Q. You were formerly vice-president, transportation and maintenance, a job now filled by Mr. Roeper. What is the distinction between this position and that of operating vice-president, Mr. Newell's position?

A. Well, under our present setup, the operating vice-president works directly with the various regional managers. He's the principal point of contact for most of their dealings with system head-quarters. The transportation-maintenance officer is more a staff man. When my former position was established in 1955 it was to coordinate operations and engineering. Mr. Roeper will continue that work.

Q. The regional organization, I take it, has substantially altered the operating function, as compared with most other railroads?



"We're going ahead with mechanization as fast as we can absorb it . . ."

A. Yes. Our size helps make the situation different. System operations were one thing, when we had three regions. With nine, it's a lot more difficult. We knew when we made the big changes four years ago that they would increase the effort required at system headquarters, particularly in coordination, because we were wiping out a whole layer of intermediate authority.

Q. Mr. Greenough, some newspapers have interpreted your appointment as meaning that service and maintenance will be getting increased attention on the PRR. Is that correct?

A. Well, I wouldn't attach any significance to that idea. As of the present, we anticipate no change in the company's general policy on these points. If there's any significance, it's more



"I will be concerned with the day-to-day administrative duties . . ."

along the line of your first question or two. You may recall, also, that Mr. Symes has often said he intends to retire at 65. I don't mean to speak for him, of course, but with this new setup the railroad does have a backstop, just in case.

Q. Would you be willing to comment on the "state of the railroad" as you begin this new position? What about your present maintenance programs, for instance?

A. You're speaking there of a matter of \$250 million to \$300 million a year. This year we'll spend about \$90 million on maintenance of way, another \$180 million on equipment. It's quite a lot of money, and how to spend it is very important. Our program is certainly not out of line, considering our income.

We're going ahead with mechanization as fast as we can absorb it. We lease and buy equipment, both. But it takes time just to train people. Equipment maintenance doesn't lend itself so readily to mechanization, but we're doing all we can in that area, adopting new methods and tools whenever we

Q. Speaking of equipment, there's much talk in the industry these days about specialized rolling stock. Where does your road fit in this?

A. There's no question but what railroads, including the Pennsylvania, are
going to have to meet this problem. We
have a lot of this equipment now, for
bulk flour, carbon black, wallboard,
things like that, and we've made commitments which are not likely to be the
end of it. I'm sure we're going to have
(Continued on page 15)

Rules Proposals Arouse Unions

► The Story at a Glance: Rail management and labor have begun following the inexact timetable for collective bargaining which can lead to a settlement—or a strike—on the work-rules issue.

Service of the carriers' sweeping rules revision proposals Nov. 2 provoked immediate—and in some cases bitter—reaction from leaders of the operating brotherhoods. Only one organization (SUNA), however, expected to file its own rules notices immediately. Three unions—the BLE, ORC&B and BRT—have slated meetings of general chairmen later this month to study carrier demands and formulate counter-proposals. The fifth operating brotherhood—the BLF&E—has placed the matter in the hands of a policy subcommittee.

To an extent, union reaction to management's work rules demands has varied according to whose ox is being gored most deeply. The BLF&E faces elimination of firemen from freight and yard service. Brotherhood President H. E. Gilbert termed carrier proposals "inhuman and unrealistic."

The BLE isn't particularly threatened with job elimination. Grand Chief Guy L. Brown took a milder approach. Management proposals didn't surprise him and, in fact, "they could have been worse."

All in all, it was an eventful week for labor-management relations:

 The RLEA kept busy drumming up support for its railroad worker rally in Chicago Nov. 5. AFL-CIO President George Meany and BRC President George M. Harrison headed the list of scheduled speakers.

 National Mediation Board efforts turned to the non-ops' vacation-holiday demands—which, apparently, will be the only "rules" program involving the non-ops in this contract go-round.

· Operating unions completed plans

for summoning the general chairmen. The schedule for meetings: BRT, Nov. 11 in Chicago; ORC&B, Nov. 18 in Cedar Rapids, Iowa; BLE, Nov. 19-20 in Chicago.

• Brotherhood chiefs showed no inclination to combine the rules dispute with the wage negotiations already in progress. W. P. Kennedy, BRT president, said the unions want the wage notices to be handled without delay. James A. Paddock, ORC&B president, said that any attempt to combine the two disputes would be "erroneous," since the wage issue is industry-wide and the rules fight affects only the running crafts.

● Both management and labor spokesmen agreed that there's little chance of national handling of the rules dispute beginning before January. Under the Railway Labor Act, preliminary conferences on individual properties must be held within 30 days of service

(Continued on page 17)

Watching Washington with Walter Taft

 THERE'S A NEW REPORT on transportation which talks sense. It's been published in Washington by American Enterprise Association, a self-styled "nonpartisan organization which studies national policy problems."

THE AUTHOR is Dr. John H. Frederick, professor of transportation at the University of Maryland. In clear and concise fashion, he identifies major transportation problems which have become increasingly critical since the end of World War II. He follows through to come up with sound recommendations for transport policy changes.

PROBLEMS dealt with include those arising from inadequate earnings which leave carriers unable to obtain equity capital, subsidies which divert business from more economical to less economical modes of transport, featherbedding, and outmoded policy and regulation.

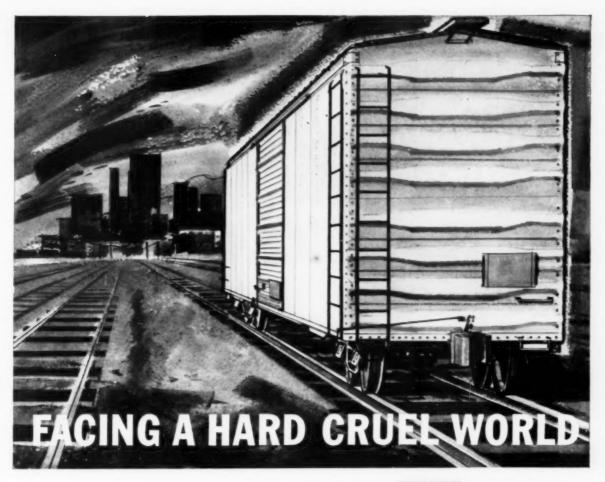
REAPPRAISAL of the government's transport promotional policy is called for. If promotional activities are to be continued, all media should be placed on an adequate-user-charge basis, Dr. Frederick says. This would require rates of airlines and highway and water carriers to reflect all costs of providing services offered. It would mean no essential change for railroads, because, as Dr. Frederick recognizes, "rail service is already financed on a user basis."

RATE REGULATION like that of the past is found to be no longer necessary. What the ICC has done thus far in the way of interpreting the 1958 Transportation Act's rate-freedom provisions means to Dr. Frederick that "there is still much to be done to bring rate regulation more in accord with present transport conditions."

MINIMUM PRICES, he argues, should be those below which a carrier "would be worse off if it took the traffic." If this test is met, he rejects the idea that public policy should be concerned further with protecting rival means of transport. He says it should be concerned only with preventing carriers from publishing competitive rates "which do not add to their net revenues . . ."

DIVERSIFICATION, which means freedom for one type of transport to operate other types, is also favored by Dr. Frederick. The railroad industry's call for such freedom is a major proposal in its legislative program.

THE REPORT SAYS diversification "could slow down the process of attrition by which common carriers now lose so much of their traffic, and it might well provide the public with better service under many circumstances." Coordination through joint rate and route arrangements is appraised as an inadequate substitute—because "coordination up to the present has been beset by suspicions between competing modes and this is likely to continue."



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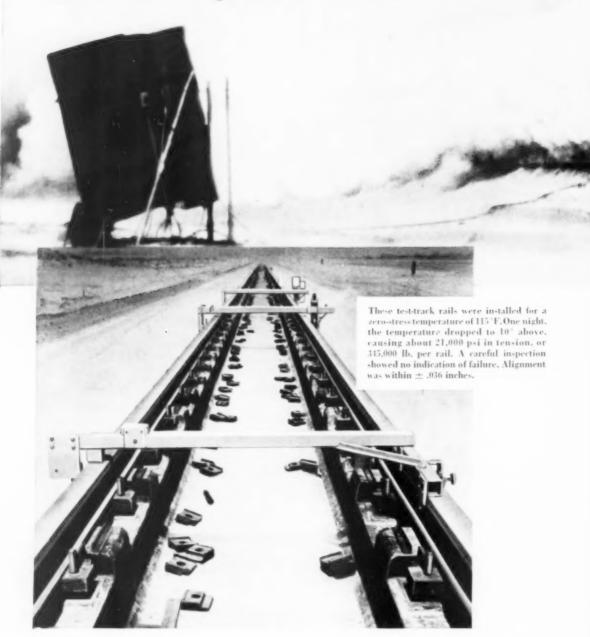
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RAILROAD DEPARTMENT



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Where Has Hot Box Odor Gone?

"In connection with journal heating: It is a fact that there is some doubt in our mind as to the amount of smoke being emitted by hot boxes. Also, the question of the odor has caused some comment, although my personal opinion is that train service employees occasionally fail to maintain sufficient alertness, so that the odor question may not be valid.

"The use of an additive in journal oils might be of some use. But anything of this kind that is used is an attempt to correct a situation that has already occurred, i.e., the journal heating has already taken place. It would appear that the best thing to do would be to continue to devote all possible efforts to the prevention of the journal heating in the first place." [These comments are from a reader with wide experience in the operating department, who prefers to remain anonymous. G.C.R.]

"In response to questions raised by one of your correspondents as to whether modern journals give off smoke and a distinctive odor when overheated and whether the use of an additive in journal oils to emit distinctive smoke and odor would be feasible:

"We have the following comments to offer on this subject:

"The materials used in modern journal lubricating devices, in general, produce very little smoke and odor when overheated in the journal box assembly, compared to that previously encountered when waste packing was used exclusively. Furthermore, with the tighter fitting rear seals and lids of journal boxes there is a tendency to suppress the emission of smoke or odor when a journal box assembly becomes overheated. It is not the matter of odor of the oil as much as the fact that the combustible material in lubricating devices gives off less smoke and odor when overheated.

"The matter of using additives in journal oil that would emit both a distinctive smoke and odor when overheated is one which would have to be explored chemically to determine whether the use of such additives would have a deleterious effect on the oil as a lubricating medium. Furthermore, on account of the small amount of free oil normally available in the journal box, it is questionable whether additives in the journal oil would be of much value in producing an effective smoke and odor warning in the event of an overheated journal.

"In this connection, the Research Department of the AAR is working on the development of an inexpensive hot box detector which, it is understood, would be placed in the dust guard well of the journal box in such a manner that a distinctive odor and a considerable amount of smoke would be emitted in event the journal box assembly becomes overheated. This may develop into a practical warning device for an overheated journal bearing and prove more effective than the suggestions advanced by your correspondent.

"An excellent method for detecting

Conducted by George C. Randall, district manager, Car Service Division, retired, this column is a forum for questions being discussed on railroads today. Questions and answers are welcome from readers at all levels of responsibility. We'll pay \$10 to any reader submitting a question that forms the basis for a column discussion.

Where Has Hot Box Odor Gone? was raised by a trainmaster who found that crews on today's trains seldom get the distinctive smoke and smell that used to be characteristic of hot journals. He wonders if an additive to journal oils that would cause noticeable smoke and odors would be desirable or feasible, or both.

hot boxes is a device known as the Servosafe Hot Box Detective manufactured by Servo Corporation of America. This device is located along the trackside and produces a record which pinpoints the location of overheated journal boxes. We are presently installing a number of these devices on the Pennsylvania. [RA, Mar. 16, p. 24]. In addition, instructions to our employees require them to be vigilant in observing trains for the purpose of detecting hot boxes."—J. P. Newell, vice president, operations, Pennsylvania.

Should Fixed Retirement Age Be Set?

"Re your article of October 5, headed, 'Should Retirement Age Be Set?' at 65, I would like to express my opinion that it should not.

"In reply to R. F. Schilp's statement suggesting full pension after 30 years of service, or similar plan of armed forces, which I believe is 20 years, I would like to ask who is going to pay for this dream plan. The Railroad Retirement Board claims that if pensions would be allowed after 30 years of service, employees premiums would amount to at least twice as much as is

now paid.

"I do not believe retirement age should be set at 65 years, for the following reasons. Some employees are in better physical and mental condition at 65 than some younger employees. At the present cost of living, those in the medium and lower wage brackets cannot put away any amountable sums of money for retirement. Certainly retirement pensions ranging from \$140 to \$170 are not sufficient to support an employee and his wife used to living in a \$300 to \$450 salary range. Just

because a man retires does not mean he has to give up living. He still wants to enjoy running an automobile, trips and some clothes. If an employee can afford to retire, because of having some supplemental income, then by all means he should retire. Retirement at 65 should not be forced on an employee who is well and able and enjoys his work.

"I believe the present plan is reasonable with the provided option."—M. N. Greene, superintendent car service, Minneapolis, Northfield & Southern.

WHAT TOP PRR CHANGE MEANS (Continued from page 9)

to move more and more into this kind of thing to remain competitive with trucks and other forms of transportation. The answer will probably lie in sharing the costs of such equipment with the industry concerned, each paying proportionately for benefits received. It is, after all, a two-way street.

- Q. Would some sort of pool operation for such equipment be feasible, with different railroads working together the way they do in Trailer Train Company?
- **A.** This is a definite possibility. You have something close to that now in your reefers.
- Q. Let's go back to this matter of service. How has Conway Yard worked out, now that it's finished?
- A. We're absolutely satisfied; it's doing just what we figured it would. We had to make a few changes, minor ones, between the time it was planned and the time it was finished, but we're happy with it. We block cars there for western connections, of course, and it saves time at the gateways.

- Q. What kind of changes were these that you mention?
- A. Well, for example, when we originally planned the yard, all the iron ore came down the Lakes. Now a lot comes in from foreign sources. We made some adjustments to meet this changing traffic situation. They were minor things.
- Q. Since Conway works so well, does the Pennsylvania have plans for another new yard?
- A. We do and we don't. We have several areas that need attention, places like Baltimore, Cleveland, and the Chicago-New York situation. But we're not moving on any of them at the moment. There are just too many imponderables, we think. The future of piggyback, for example. We don't know how big it will get and we don't want to close any doors. That might happen if we go ahead now.
- Q. You think piggybacking will get that big that fast?
- A. I certainly do. We've hardly scratched the surface.

- Q. Mr. Greenough, there are two other areas we want to ask about. Do you have any specific plans relating to freight sales, and how do you feel about the future of your passenger business?
- A. I can tell you about freight sales very quickly. I've had little experience with that function, and wouldn't want to comment about it at all at this point. I do feel, as a general rule, that the old concept of charging what the traffic will bear is finished, but how we can move to replace that with something else that's the problem. Obviously, this matter of adjusting rates and pricing is one of our most critical areas.

The passenger situation, as I see it, is really two different problems—commuters and intermediate-long distance. Commuters are going to be around for a long time yet, whether we want them or not, and it seems to us that some measure of assistance from the communities and states is necessary. The intermediate and long-distance passenger train is something else again. We've made a number of studies of our New York-Washington service, for example, and we think there's a good chance that we can work something out on a run like that.

Month's Wage: \$850-Plus Benefits

A new slant on legal featherbedding has cropped up on the Chicago & Eastern Illinois—where an employee who earned \$850 during a recent month also qualified for \$40.80 unemployment compensation during the same month.

The paradoxical situation, C&EI President David O. Mathews notes, has developed as a result of the 1959 amendments to the Railroad Unemployment Insurance Act. Moreover, the road points out, the Railroad Retirement Board has ruled that an engineer is entitled to unemployment compensation if he operates less than 1,400 miles during a 14-day period. Here's how the law and the interpretation have been applied on the C&EI:

Over the first 14 days of last June, one of the road's extra engineers (regularly assigned to the extra board) worked 1,321.2 miles. According to the RRB, this made him eligible for unemployment benefits.

Actually, the engineer worked six days out of 14, for which he was paid gross compensation of \$283.16. The law, as recently amended, provides that an employee must wait four days before claiming unemployment benefits. The RRB ruled that this four-day waiting period should be deducted from the

eight days the engineer didn't work. Thus he was paid four days' unemployment benefits—\$40.80 at a rate of \$10.20 per day.

Starting with the 15th day of the month, the same engineer earned gross compensation of \$567.67 through June 30. His gross for the entire month: \$850.83 from C&EI; \$40.80 from unemployment compensation.

Ironically, C&EI adds, the railroad was taxed \$15-334% of the em-

ployee's first \$400 in wages—as its unemployment account contribution on the engineer's compensation. The tax, the road observes, "is designed to provide a fund to alleviate the shock of unemployment. Yet here the law operates to pay \$40.80 to a railroad employee for a month during which [he] received gross compensation of \$850.83 from the C&EL."

An isolated case? Not on C&EI. Pending are 22 similar cases.

As the Publisher Sees It . . .

Rode one of my favorite railroads the other day and had lunch in the dining car. It shimmied so severely that coffee just wouldn't stay in the cups. My waiter was pre-filling the cups about onethird, and warning his customers to be careful—"this car rides awful rough today."

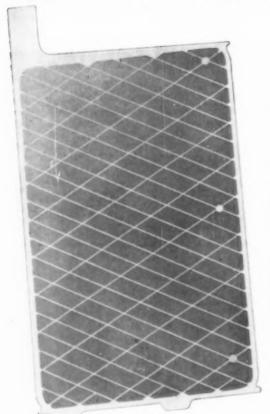
I asked the steward about it and he produced a car card that showed the condition first reported on Oct. 5, and daily up to Oct. 14. What more could he do, he asked.

Well, during those nine days

this car has served "roughly" 2,-000 passengers. It's going to have to be repaired pretty soon. When it is repaired the cost will be just what it would have been a few weeks ago, plus approximately 2,000 passenger-mad-hours. Here is a statistic that ought to be considered if remaining passenger services are expected to earn maximum revenues.

Robert & Louis

NEW GOULD SILCONIC PLATE **Increases Battery** Life 25%-FREE!



A vital contribution to motive power batteries, Gould's NEW Silconic Plate prevents grid corrosion, the most common cause of battery failure.

Sound, tested and proved, the principle is simply this: Gould introduces silver and cobalt into active materials of the positive plates. The silver and cobalt migrate toand collect on-positive grid members, forming an insoluble oxide surface impervious to acid and oxygen attack. The longer the battery operates, the deeper the silver-cobalt penetrates into the grid metal, thus greatly prolonging life. In applications where batteries are idle for periods of time, Gould's Silconic Plate prevents migration of materials to the negative plate, effectively reducing self-discharge within the cell.

Further overall strength is achieved when arsenic is added to the antimonial alloy of the plate, resulting in an extremely dense, homogeneous grid free of flaws. This new physical and chemical strength-together with Gould's compact battery design-add up to the best motive power battery you can buy. Write today or call your local Gould representative. He's listed under "Batteries Industrial" in the yellow pages. Gould-National Batteries, Inc., Trenton 7, N. J.

More Power to you from GOULd

RULES PROPUSALS AROUSE UNIONS (Continued from page 10)

of notices. With union programs not yet definite, local meetings probably won't come until late this month. At least two factors—the time needed to set the dispute for regional-national handling and the nearness of the Christmas holidays—point to an early-January start for conference committee negotiations.

SUNA's demands, first to be served by an operating craft, will involve vacations, holidays, life insurance and sick leave and certain compensatory rules. None of the other unions' proposals are in final form, although BLE chairmen were instructed more than two months ago to study possible demands for changes in compensatory rules, use of an apprentice engineer, the six-hour day, sick leave (RA, Aug. 31, p. 9)

[One of the non-operating groups, the American Train Dispatchers' Association, has approved a report recommending that ATDA officers start a movement, through national legislation, for a six-hour basic day at no reduction in pay. A union committee report was quoted as saying that dispatcher life expectancy is about 15 years short of the 67-year industry average and "relief from the strain and shock of the last two hours of work each day will have a salutary effect on longevity."]

Most of the attention last week was focused on the impact of the carrier notices—even though the general content of the demands had been strongly indicated for weeks before.

BLE Chief Brown had a comment on each of the six basic points covered by the carriers' demands—and on three of the five points affecting engineers, he indicated some willingness to talk about changes. On two points—elimination of barriers between road and yard service and elimination of the fireman—he stood firm against the revision of the rules.

He saw a chance to work out some agreement on the basic-day demandprovided there's no loss of pay to the engineers. He opposed the industry's companion proposal to eliminate mileage regulations. Elimination of terminals and lengthening of runs, Mr. Brown commented, are matters "that need discussing if the railroads are to compete with other forms of transportation." He recognized that terminal location is a holdover from the steam era -but, he added, "the carriers will have to recognize their responsibilities to their present employees" in any changes that might be made. As for rules requiring standby operating personnel on selfpropelled maintenance-repair-inspection equipment, he conceded that some revision "is probably in order . . . but many rules serve a useful safety purpose and could be justified on that basis. We don't want employees not familiar with train orders and operating rules out there on the main track."

BLF&E President Gilbert's response to the rules demands was less mild. The proposals, he charged, are "proof that the railroad industry intends to maintain its record profit levels by shoving thousands of employees into unemployment lines. Every proposal advanced by the railroads has one purpose—less employees and more work from the remaining force at less pay. The proposals rank as an inhuman affront to rail workers and their families and are totally unrealistic in the practical aspects of railroading."

If the railroads won all they're seeking, he declared, "entire rail communities would cease to exist. Rail employment—now at its lowest level—would sink even lower. Railroad workers would have to submit to corporate slavery and safe operation would be virtually non-existent."

Neil N. Speirs, president of SUNA, said carrier demands appear to be "designed to break down craft lines and create a reservoir of manpower which the carriers could use in any capacity they desire."

'Propaganda Mills' Hit

In an address prepared for delivery at the Chicago rally, BRC President Harrison bitterly attacked management for what he called its campaign "to discredit railroad workers in the eyes of the world."

"The propaganda mills in the advertising agencies hired by the carriers in this fantastic multi-millioa-dollar campaign of false charges of featherbedding among railroad employees have been going around the clock," he said. "You've all seen those advertisements, containing vicious and untrue assertions that the working practices of railroad workers will cost the public each year as much as the Chicago fire, the San Francisco earthquake, and other such disasters. Only a New York City Madison Avenue copy writer who was half awake could have dreamed up such nonsense. . ."

He said the Railway Labor Act has worked "remarkably well" in maintaining peace in the industry, but "this record is now being threatened . . . by a propaganda campaign of railroad management, which has the effrontery to publicly declare that it intends—and unilaterally—to change the work rules which were established to protect the public as well as the railroad workers—even if it has to lock out its workers by forcing them to strike."

Mr. Harrison said the railroads appear to have "unlimited funds to attack their workers" in advertisements—but they've "been spending practically nothing in relative terms to insure the prosperity of their industry."

He said the "employees the railroads are attacking" are "the most productive group of workers of any American industry."

"We are in a growing, expanding economy and there will be tremendous growth in the need for railroad services—of all categories—in the years ahead," said Mr. Harrison. "If the railroads will stop wrecking their own plant by deliberate destruction of passenger service, even on profitable runs—if they will stop the delay of freight and other services to the public by failure to supply railroad operations needed, the brightest and most profitable period still lies ahead. But to attain that goal they must continue to have the support and cooperation of their employees."

Wage Showdown Reported Near

The most ominous labor-management note last week concerned not the rules dispute but the stalled negotiations on wages. Unless mediation proceedings show progress in a hurry, a top brotherhood officer warned, labor may press for immediate appointment of an emergency board. The brotherhoods could force the issue by attempting to break off mediation or by spreading a strike ballot.

Mediators stepped into the wage disputes involving the Engineers, Conductors and Switchmen during the week of Oct. 26. Meetings since that time, this labor spokesman declared, have brought carriers and organizations no closer to an agreement.

He indicated that mediation might be terminated in about another week, unless some offer is forthcoming.

Other union spokesmen didn't view the situation as critical at present—and there were indications that informal propositions are being explored. (One, it's reported, would involve continuation of the cost-of-living clause and provision for a deferred wage increase.) One brotherhood officer said he expects mediation efforts to be intensified this week.

How to Reduce Crosstie Costs

▶ The Story at a Glance: Several proposals aimed at lower costs for crossties were put forward at a meeting of tie producers and railroad users. They include suggested specifications for a standard treated tie and a plea for railroads to accept hardwood ties other than oak. The group was also told how railroad crosstie buying practices result in higher prices for ties.

Railroads can effect substantial reductions in crosstie costs—but to do so they will have to make important revisions in some of the practices they have been following for many years.

This statement summarizes opinions expressed in addresses presented at the annual convention of the Railway Tie Association in Cincinnati, Ohio, Oct. 28-30.

The appeals for changes in crosstie practices came primarily from producers and treaters of wood ties, but not entirely. A railroad man told the group—composed of both tie producers and railroad officers responsible for the procurement and use of ties—how the railroads' crosstie buying practices produced "very expensive results" in 1956 and again in 1959.

Standardization of crossties was one of the areas in which savings were visualized. But there are obstacles confronting such a step, according to F. J. Fudge, timber engineer of the New York Central, and chairman of the Committee on Ties of the AREA. "Some railroads do not require their ties to be adzed and bored while others do," he explained. Moreover, he said, "those railroads requiring adzing and boring have many different sizes of tie plates and these plates have many different locations of holes for spikes. The railroads would first have to standardize the spacing of spike holes and size of tie plates." His conclusion: "Standardization of adzing and boring is a long way off."

Plan for Standardization

A suggestion for overcoming this problem, including a definite proposal for a standardized boring pattern, was offered by E. R. Snodgrass, manager operating and engineering department, Wood Preserving Division. Koppers Company, Inc. His proposal was made on the premise that "probably the principal benefit from adzing and boring crossties before treatment comes from the assured penetration of preservative in the wood around the spike."

Since selection of one spike-driving pattern as a standard is not practical, said Mr. Snodgrass, "we can do as some railroads have already done. We can compromise and bore a pattern, not for spikes but for assurance of preservative penetration in the rail-base area of the tie." His recommendation is that eight ½-in. holes be drilled, four at each rail base, in a staggered pattern that will fall well under the rail. The theory is that "end grain penetration of the preservative from these holes will spread into the area where spikes are driven."

"Driving spikes away from the drilled holes has been practiced inadvertently for so many years that I expect we might even find service records to show that the practice is acceptable," said Mr. Snodgrass. In addition to the proposal for a standard boring pattern, he recommends a "light adz cut over an 18-in.-wide portion of the face of each tie at the rail base."

A long step toward a standard preservative specification for crossties was also proposed by Mr. Snodgrass. As the situation stands now, he explained. there are in common use some 10 preservative solutions or mixtures and each is used in four or five retentions, resulting in "forty or fifty preservative specifications in common use." Reasoning that a "compromise on one preservative may be too great a step to take all at once," Mr. Snodgrass offered two preservative specifications for consideration as a possible standard. These are a 70/30 creosote-coal tar solution to be used in not less than 7 lb per cu ft retention; and a 50/50 creosotepetroleum mixture to be used in not less than 8 lb per cu ft retention.

On the matter of the advantages to be derived from a standard treated tie. Mr. Snodgrass pointed first to considerable savings in investment dollars and operating expense that, he said, would be realized at the treating plant. But these savings, he added, are "incidental to the big benefit of having a standard treated tie." A tie "acceptable for use at any point on any railroad, even if it were acceptable only as a second choice, would encourage tie producers to maintain inventories from which the railroads could meet their widely fluctuating crosstie needs. It would give the tie maker a steady market for his crossties. The cost to the tie makers. the tie treaters, and the railroads will surely be less than the costs under our present-day efforts to schedule tie making and tie treating in step with 'feast

or famine' track maintenance."

The mechanism that causes tie buying on a "feast or famine" basis to be costly to the railroads was explained in an example cited by another speaker, R. B. Smith, buyer forest products and manager treating plants of the Rock Island. As he described it:

"In early 1958 when business was in a severe slump there existed a distinct buyer's market in railroad crossties and they were less costly than at any time since 1955, despite the labor and stumpage cost increases during that period. It was an ideal time to continue a high level of tie buying, with substantial savings to be realized over the carrying charges.

"Unfortunately, for financial reasons, we like all other railroads discontinued our tie purchases from March to September 1958 and have since had considerable difficulty in getting our producers to meet their quotas. In fact we found it necessary, effective Aug. 1, 1959, to increase tie prices approximately 10% to stimulate production and to meet the prices being paid by other railroads in the same tie-produc-

ing territory.

"In other words, while remaining out of the buyers' market in 1955 and 1958 while other railroads were doing the same, our tie inventories were decreasing to the point where, in mid-1956 and again in mid-1959, most midwestern railroads, including the Rock Island, found it urgently necessary to increase their purchasing. This created a concentrated, false 'pent-up' demand resulting in some of the roads' buyers competing against each other to the detriment of all with respect to supply as well as price and with very expensive results."

On the Scarcity of Oak

Another crosstie buying practice of some roads—that of demanding nothing but oak ties—came under critical scrutiny at the meeting. Waldo E. Tiller, president of the Tiller Tie & Lumber Co., offered a word of warning on this score. "There isn't any doubt," he said, "but what the roads demanding nothing but oak ties will have to pay a premium in price, and frankly, I doubt in an active market they can procure all their requirements in nothing but oak."

"There is a heavy drain throughout the country on oak timber," said Mr. Tiller. "The stands are rapidly being (Continued on page 27) FOR CARS OF ALL CAPACITIES..



GR

(Cushion-Ride)

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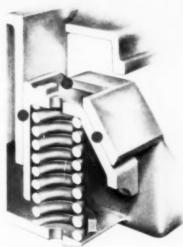
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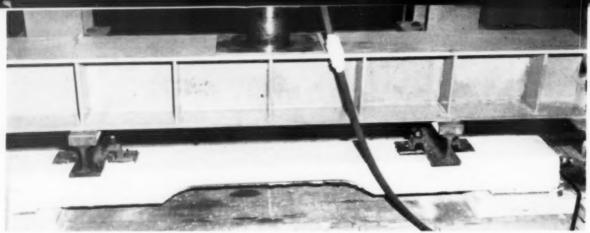
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OUTAWAY OF THE BUCKEYE C.R. PACKAGE UNIT SHOWING THE FEATURED MAXIMUM FRICTION BEARING SURFACES





CONCRETE TIE in testing machine at AAR Research Center. Researchers report that Tie E withstood two mil-

lion cycles of a bending moment equal to 150,000 in.-lb. Manufacturer expects the tie to have a 75-year life.

RRs Plan Concrete-Tie Tests

The concrete crosstie is again being seriously considered for use on American railroads.

This renewed interest is evident in several quarters. The most tangible evidence of it is the plans of the Seaboard Air Line and the Atlantic Coast Line to install quarter-mile test sections of concrete ties in the near future. Other roads, including the Baltimore & Ohio, the Denver & Rio Grande Western and the Western Pacific, have indicated interest in similar tests.

Based on Three Factors

Behind the revival of interest in the concrete tie are three principle factors:

 Extensive use of concrete ties in Europe, especially Germany.

 The special properties of prestressed concrete.

Advantages of use with continuous welded rail.

Increased use of the concrete tie in Europe has been sparked primarily by a shortage of timber. Dr. Gerhard Schramm, track advisor for the German Federal Railroad, in comparing the relative costs of wood and concrete ties in Western Germany, says "the concrete tie is superior in economic respects in the long run, if it has a longevity of more than 35 or 46 years. depending on the cost of wood ties." And, he adds, it "appears certain that the concrete ties will have a longer life." There are, according to Dr. Schramm, about 12 million concrete ties in the tracks of the German Federal Railroad (RA, June 22, p. 43).

The wood tie is relatively less costly here than in Western Germany. But experience with concrete ties in Germany, and elsewhere in Europe, has, if nothing else, demonstrated their practicability in service, according to observers in this country.

Prestressed concrete, use of which has grown rapidly in this country in recent years, has been an important factor in reviving interest in the concrete tie. Ordinary reinforced concrete has limited ability to withstand tensile stress without cracking. Since the underside of a tie directly under the rail is subject to considerable tension, crossties of conventional reinforced concrete are apt to develop cracks in this area.

On the other hand, when ties are made of prestressed concrete the pretensioned cables embedded in them have the effect of keeping the concrete in compression, or at least of preventing the tensile stress from exceeding a predetermined amount. If this level is exceeded due to excessive load, and cracks do develop, they close up as soon as the load has been removed. For this reason, explains G. M. Magee, AAR director of engineering research, prestressed concrete ties can be expected to have a much longer service life than those of ordinary reinforced concrete.

Where the rail in track is welded into continuous lengths it is a recognized fact that very large stresses are built up in the rails because of temperature changes. For this reason, the stabilizing effect afforded by the greater weight of concrete ties when used with continuous rail is thought to have considerable value. That this factor has a bearing on the present interest in concrete crossties is indicated by the fact that the experimental installations on both the Scaboard and ACL will be made with continuous welded rail.

Private enterprise must also be counted as a factor in furthering the cause of the concrete tie. Several manufacturers of prestressed concrete products around the country, looking for new markets, have been impressed by the volume possibilities inherent in the railroad field if the concrete tie were to win even limited acceptance. Notable among these is the American Concrete Crosstie Corporation, Tampa, Fla.

This firm requested, and obtained, the cooperation of the research staff of the AAR's Engineering Division in developing a design for a prestressed tie. Following extensive tests in the AAR Research Center at Chicago, Mr. Magee and his associates have now settled on a design known as "Tie E."

Cost was a primary consideration in the development of this design. One way to minimize cost would be to increase the tie spacing in track to 30 in. from the 20 in. now generally used for wood ties, thereby reducing the number of ties required from about 3,200 per mile to about 2,100. Studies and tests have shown that the resulting increase in flexural stress in the rail, amounting only to about 10%, would be well within the capacity of the heavier rail.

Tie Is Wider at Bottom

To obtain the bearing area in the ballast required with the greater spacing. Tie E was made 12 in. wide at the bottom at the ends. It tapers to a width of 9 in. at the top. To add to the stability of the tie in the ballast, the bottom is concave at the ends. For a length of about 3 ft at the middle, the tie is wedge-shaped on the bottom as a means of preventing a centerbound condition.

Because of the greater compressive strength of concrete compared with wood, a tie plate only 5 in, wide will be used with Tie E. It will be separated from the tie by an insulating pad, probably of creosoted plywood. At each tie plate, the rail will be fastened on each side by a special clip held down by a bolt extending through a hole cast in the concrete. Insulation is provided by a flanged rubber sleeve around each bolt. In addition to serving as a rail fastening, the clips are designed to exert enough pressure to prevent creepage of the rail.

How much will the concrete tie cost? In a brochure published by the American Concrete Crosstie Corporation and entitled "Concrete Railway Ties," the "maximum cost in foreseeable future" is given as \$9 per tie. Presumably, this figure is an estimate based on the cost of manufacture using a special machine perfected by the company, which is said to be able to produce 1.000 ties per day.

Comparative estimates are given in the brochure of the cost of a mile of track laid with wood ties and of a mile laid with concrete ties. According to the estimates, which exclude rails and labor, the cost is about \$3,000 more per mile for track laid with concrete ties.

Proponents of the concrete tie are banking on longer service life and lower maintenance costs to place concrete ties in a favorable cost position compared with wood ties. The service life that might be obtained from the prestressed concrete tie is "questionable at this time," says Mr. Magee. But he adds that "it might not be too optimistic to expect a 50-year life." He predicates this estimate on the use of a strong, dense concrete with air entrainment and on the assumption "that the tie does not become unserviceable in the meantime due to damage from derailments."

On the matter of what happens when a derailment occurs, the brochure on concrete ties recounts an experience in Spain when a train was derailed at a speed of 30 mph because of a broken axle under the tender. "The wheels," it says, "ran over an 800-ft section of concrete crossties and not one had to be replaced."

The cost of maintaining track laid with concrete ties will be determined through experience with the experimental sections. Now, such costs are a matter of conjecture only, except for observations made during the laboratory tests. These indicate, according to members of the research staff, that there may be some advantage in favor of the concrete tie.

Other questions remain to be answered. These stem mainly from the greater weight of the concrete tie and its other special physical characteristics, and are concerned with the problems of distribution, handling and insertion. More information on these aspects of the subject will become available when the quarter-mile experimental installations are made on the SAL and ACL.

Railroading



After Hours with

Jim Lyne

BATTLE OF THE GAGES—No surprise to me that I've got some mighty interesting

got some mighty interesting mail on my remarks about narrow gage. A couple of friends set the record straight on the fact that most U.S. narrow gage was 3 ft rather than 3½ ft. Also, there are those who insist that 2-ft gage and being a "real railroad" are not incompatible, C. W. Hauck, president of the Iron Horse Development Corp. of Cincinnati, names a half-dozen "real railroads" in Maine alone—all 2-ft gage.

The only narrow-gage line in regular commercial operation today (apart from the purely tourist attractions), he says, is the Rio Grande's Durango-Silverton line. (There is, also, the 3½-ft-gage Newfoundland line of the CNR).

William Vigrass of Cleveland, also, writes me about Maine's (and other) two-footers. He says almost 1,000 miles of 2-ft gage in South Africa were recently widened to 3½ ft (which is "standard" in that country). And these 2-ft lines have been powered by substantial Garratt locomotives, which pull upwards of 400 tons.

Chief Mechanical Engineer John Ingles of the DT&I passes along similar information, also recommending a book "Little Railways of the World," which covers them all—gages down to less than 1 ft!

EFFICIENT MAGAZINE USE—I'd like to get advice on magazine reading—seeing as how I am both a producer and a consumer of such products. As a consumer, I divide magazines into two categories—those I skim through and never want to see again, and those I either want to file for a while, or to clip something from, for filing. I'm perfectly willing to share the skim-through periodicals with my associates. But, obviously, that won't work for those I want to file or clip.

I hope Railway Age is this latter kind of magazine for most of its readers—but, sometimes, I wonder. Especially when I see the extent to which some copies are made to serve a half-dozen readers or even more. Not many people would want to share a 5¢ pencil with several associates. So why have to share a copy of a magazine priced at hardly any more than a pencil? And less than the morning newspaper?

There's such a torrent of reading matter these days, that it takes skill to winnow the wheat from the chaff. It would help if people who've developed techniques for doing this job efficiently would pass the word along

DOES RATE FREEDOM WORK?—A friend of mine wants to know why it is that the British railways—which enjoy practically complete freedom in rate-making—appear still to be losing freight traffic to the highway. I believe there are two answers to that question. One is that, with the short hauls and short trains prevailing in Britain, the cost advantage of rail over highway transportation is much narrower in Britain than it is, on the average, on this side

of the Atlantic.

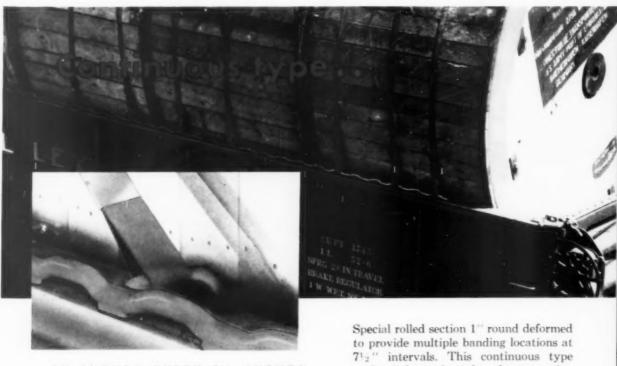
The other answer (and probably the more important) is that the British railways have enjoyed rate-making freedom for only a couple years—and, naturally, they haven't had time, yet, to explore all its possibilities. When you change freight rates, you have to proceed with caution—and after exhaustive study of the pertinent facts—or your new rates may not be any more effective than the old ones.

You give a hammer-and-saw carpenter a power saw. Eventually, he'll learn to do miracles with it. But if he tries fancy tricks at the very outset, he may wind up with a few fingers missing.

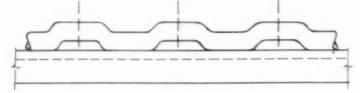
LADING BAND ANCHORS

Designed for Maximum Utility

Designed especially for both gondola and flat car application. Welded to position, both types afford easy band access and fully rounded contact surfaces.



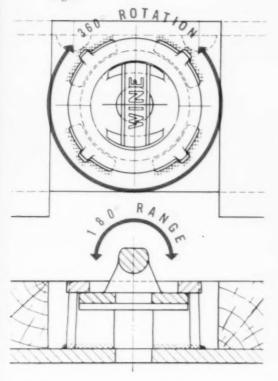
. AN ANCHOR EVERY 71/2 INCHES

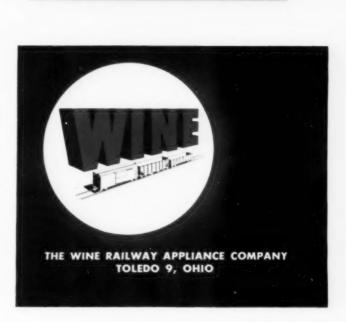


to provide multiple banding locations at 7½" intervals. This continuous type anchor is best adapted to the top coping of gondola cars. Composite lengths available for various car design requirements. Individual cast steel anchors for end strapping complete the application.



Electric cast steel with an unlimited range of adjustment in two planes the universal type anchor is best suited for flat car floors and drops flush when not in use. Multiple application of the universal type affords anchorage from any angle.





38 RAILROADS DISCOVER how to maintain a freight car's bearings

Want to cut your direct labor and material costs for freight car bearing maintenance as much as 98%?

Sounds impossible, doesn't it? But it can be done and 38 railroads have the proof.

They've been using KAR-GO Bearings on 805 freight cars for the past year, and after an average 20,000 miles of grueling duty, here's what Allison has learned:

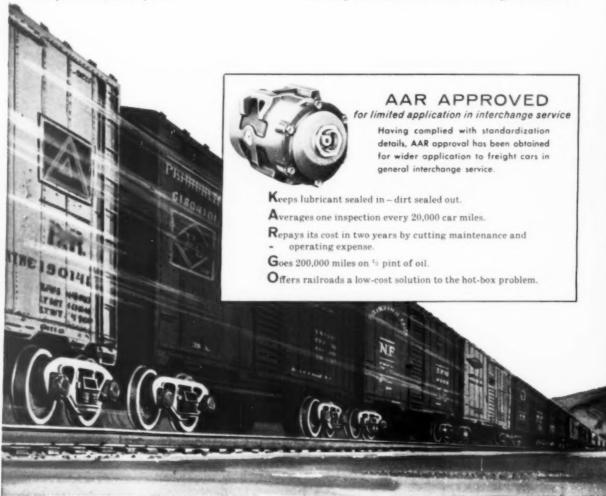
Average KAR-GO Bearing direct labor and material costs per car-\$1.16 a year!

That's a full \$94.84 less than the average cost of maintaining a standard journal bearing on a car traveling 20,000 miles.

And that's not the whole KAR-GO savings story by any means.

Take, for instance, savings in bearing replacement. When the KAR-GO equipped cars had chalked up 20,000,000 miles, only 4 bearings needed replacement. Compare this with what your road experiences with waste- or pad-lubricated bearings.

Not only does KAR-GO mean savings. Stock that



for \$1.16 a year

Two-thirds of the Diesel locomotive engines on American railroads are equipped with Allison connecting rod and crankshaft main bearings and piston-pin bushings.

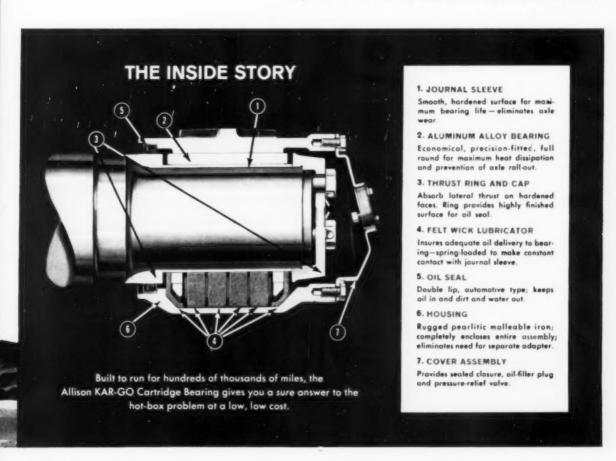
rolls on KAR-GO Bearings spends more time running, less time standing still for repairs. That adds up to greater revenue per car.

If you're from Missouri – and want to see the KAR-GO savings and earnings story for yourself and for your railroad, install KAR-GO Bearings in your next freight car conversion or new car build. You'll want to go the moneysaving KAR-GO way—all the way.

KAR-GO, ALLISON DIVISION OF GENERAL MOTORS Indianapolis 6, Indiana



A product of and built only by the Allison Division of General Motors



P&WV Likes Composition Shoes

Operating and mechanical departments must cooperate closely during installation of composition brake shoes on locomotives previously equipped with metal shoes.

That's what W. C. Kresge, general superintendent of the Pittsburgh & West Virginia, told Railway Age recently while discussing the program which equipped all his road's diesel locomotives with Cobra composition brake shoes.

Instruction Is Imperative

It is essential, he stresses, for road foremen to know exactly what composition shoes will and will not do. Enginemen also must be properly instructed in the operating characteristics of the composition shoes.

The P&WV began its Cobra-shoe program because it had no equipment for turning wheels in place under locomotives. Last year's revision of the Other-Than Steam Locomotive Inspection Rules made correction of flat spots more difficult for the hilly short line.

The first installation of Cobra composition brake shoes on a P&WV locomotive was made in June 1958. Now all the road's 26 Fairbanks-Morse 1,600-hp and 2,000-hp road switchers are so equipped.

After several months of all-Cobra operation, the road says:

- Cobra composition brake shoes last four times longer than metal shoes;
- Thermal cracking of wheels has been eliminated;
- Wheels retain longer their proper tread and flange contour; and
- Slid flats and built-up treads no longer occur.

No Dynamic Braking

None of the 26 locomotives has dynamic braking, and the nature of P&WV operations resulted in many flat wheels. Faced with the rules revision, the road decided to attempt to minimize flat spots rather than try to justify the investment in new equipment for removing them. The P&WV is one of the first U. S. roads to convert existing road service locomotives from metal to composition brake shoes.

The mechanical department found conversion an easy job which could be completed on a diesel unit in about four hours. It used a Westinghouse Air Brake conversion kit which included bushings for the eight locomotive brake cylinders, grommets for sealing the



LOCOMOTIVES of the Pittsburgh & West Virginia have been among the first road units to be converted to composition shoes.

bushings against the cylinder heads, new smaller pistons, the 16 flange-type Cobra shoes, and a new pressure spring for the locomotive's independent brake valve.

Braking forces must be reduced with Cobra shoes because of their higher coefficient of friction. This is achieved on the P&WV units by bushing the cylinders and installing pistons of smaller area. Smaller cylinders are used initially when new locemotives are being equipped with composition shoes.

On the P&WV, cylinder pressure was increased to produce a greater differential between the applied and released positions. This insures that shoes will move clear of the wheels when released.

Independent brake pressure on all P&WV locomotives is now set at 60 psi—25 psi higher than when the units had metal shoes. During the installation period, for the most part only Cobra-shoe diesel units were operated together in multiple-unit locomotives. If it was necessary to mix the two types of units, the metal-shoe unit was placed at the front. This guaranteed that the 60 psi independent air setting on the composition-shoe units could not lock the wheels on the metal-shoe units.

The constant frictional characteristics of composition shoes necessitated the educational program for enginemen. The increasing coefficient of friction for iron shoes as speed decreases means that the locked wheel stop is almost traditional. After an epidemic of slid flat spots on the composition-shoe units, investigation showed that

enginemen had been stepping up the independent brake pressure to produce locked-wheel stops with the composition shoe units.

Because of the uniform coefficient of friction, this could result in locked wheels at speeds which could produce serious flat spots. The 60 psi independent setting will give about the maximum possible braking effort, and only small increases will slide the wheels. It was finally necessary to seal the independent valve pressure adjustment and make enginemen responsible for broken seals.

More Use of Automatic Brake

During the investigation, it was found that enginemen place undue reliance on the independent brake. Road foremen are now stressing greater use of the automatic brake on the P&WV's frequent and heavy grades. This makes possible cooler wheels and produces smoother train operation.

Several of the storage tracks on the road are on grades. It was found that in recharging cars which had been stored, it was necessary to keep hand brakes applied until the train line was charged and an automatic brake application made. This was discovered after units with Cobra shoes were moved by cuts of cars they were trying to hold with independent applications alone.

After solving these operating problems, it was found that wheel and shoe life could be extended appreciably. (Continued from page 18)

diminished and the competition between various wood products for what oak stumpage is available is fast increasing the price, and is, at the same time, diminishing the supply."

Mr. Tiller is also convinced that "present specifications should be changed to permit more tolerance on wane." He described as "inconsistent" the practice of allowing "certain amounts of wane on some items such as car material and plank" and not allowing a like amount on crossties.

In Mr. Tiller's opinion, "the most important thing for you railroad engineers and purchasing agents to realize at this time is that your crossties are being made by and large by saw mills that have the same opportunity to cut the same timber into wood products other than ties. If you do not meet the situation with comparative specifications and prices of other wood products, you are going to find that the sawmills will more and more stop cutting crossties and cut other items such as decking, plank, car material, flooring stock, and construction lumber."

Measures being taken by railroads to reduce tie costs through longer service life were described in an address by Frank R. Woolford, chief engineer of the Western Pacific. On his road these measures include larger tie plates, tie pads and dowelling. In Mr. Woolford's opinion, "a 40-, or possibly a 50-, year life should not be unreasonable to expect from an average wood tie properly seasoned, effectively treated and protected before being placed in track."

Extensive experiments with pentachlorophenol-petroleum solution as a preservative for crossties were described by E. A. Bromley, the CNR's vice president-purchases and stores. These were started in 1954 with 5% penta in petroleum. Later the amount of penta was reduced to 3%. According to Mr. Bromley, tests have "confirmed" that 3% solutions of pentachlorophenol in oils used "have at least equivalent fungicidal properties to 50/50 creosotepetroleum solutions..."

The policy the CNR is following in the treatment of ties with penta "is purely an economical one and has been made possible because of the availability of suitable petroleum oil within close proximity of Edmonton at attractive prices. The intent has been to find a lower cost preservative equal to standard 50/50 creosote-petroleum mixture and thus introduce competition in the treating industry." To date, said Mr. Bromley, the CNR has treated 1,970,000 ties with penta at its plant at Edmonton, Alta.

Editors Afield

Passenger promotion took some new twists in the Northeast last month, and Associate Editor Rod Craib was along for the ride. On the Reading, Oct. 25, he joined 974 other travelers with a passion for soot and cinders in a steam excursion. On the New York Central two days later he was part of the press contingent on an introductory run of the Central's new Sleepercoach service.

Something old. In life, steam locomotives may have been noisy, dirty and generally undesirable, but in memory's eye, their image has changed for a lot of people, not all of them rail fans. So when the Reading brought one of its T-1 class steamers out of retirement last month for a passenger excursion, 975 ticket holders filled the train and uncounted thousands (estimated by Reading P-R man Bob Crompton as 50,000) lined up along the right-of-way to watch the steam train go by.

"These excursions," says Passenger Traffic Manager W. D. D. Prince, "were brought about by popular demand of many rail fans, and others who wanted to see and hear a steam locomotive again." The original idea came from President Joseph A. Fisher, who wondered why a venture that appeared to be profitable for an outside sponsor would not also be profitable under railroad sponsorship.

Reading passenger people did some extensive research before announcing the trip, then aimed for the widest fan appeal. Among the features: a chance for camera fans (all present were in this category) to get off and get a picture of the engine in action, an open door on a combo near the engine (for audio enthusiasts who recorded the huffs and puffs for posterity) and souvenir bandannas and Reading-emblem caps for all ticket holders.

A topographical map of part of the route was delivered to Public Relations Director Harry Hammer before the trip with a request from the sender that Mr. Hammer find out the precise time the train would pass a particular spot near Port Clinton. The writer explained that he was a pilot and photographer as well as a railfan and that he planned to meet the train at that spot and take aerial views. Mr. Hammer sent him the information he wanted, and when the special

started up the grade out of Port Clinton, the plane was overhead.

Every ticket was sold well in advance, and the road finally added a 16th car to the 15 originally planned. With locomotive 2124 and all cars fully depreciated, and with full fares sold at \$9, the Reading seemed likely to gain revenue as well as good will from the trip. (And as someone aboard the train remarked, with the steel strike continuing, the road might well make steam trips a regular feature just to keep some cash coming in.)

Something new. The "Sleeper-coach Press Run" from Grand Central to Grand Central via Syracuse was one part of the New York Central's campaign to launch its new Sleepercoach service. To demonstrate the cars' features, 11 reporters (representing New York, Boston and Newark papers, a wire service and Railway Age) were asked to board the car Tuesday night, ride with it on the "Wolverine" to Syracuse and return with it on the eastbound "Wolverine" Wednesday morning.

Seven Central men (including Bill Main of the passenger department, Advertising Director Cliff Ramsdell, and Bob Eisenhauer and Dick Marshall of public relations) along with Goodrich Murphy, Joe Kelly and Bob Sherman of the Budd Co. were on hand to provide a rurning commentary. Overcoming traditional press skepticism, the car proved its point — Sleepercoaches are comfortable.

The Sleepercoach campaign, Dick Marshall says, includes newspaper ads, direct mail, posters and exhibits and has generated substantial interest. The cars were shown in eight cities before going into service Nov. 1, drew 21,000 people for a guided tour.

Entrance to the Sleepercoach exhibit was through a standard reclining-seat daycoach, where the point was stressed that the private room accommodations cost only \$7 more single and \$12.60 double than a reclining seat. A 36-in. realistic plastic doll in a Sleepercoach crib (available in all rooms) was the big crowd stopper, and drew comment on separate TV reports in six different cities.

Service (New York-Chicago on the "20th Century" and Boston-Chicago on the "New England States") has been sold out, so far, on every run.

Page Service RAILWAY AGE

REVENUES AND EXPENSES OF RAILWAYS

(Dollar Spures are stated in thousands: i.e. with last three digits omitted)
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MONTH OF ALGUST AND EIGHT MONTHS OF CALENDAR YEAR 1999

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(Continued on page 30)

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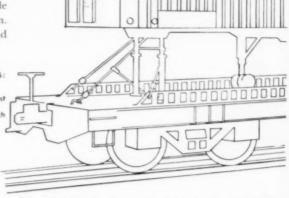
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RUNKEN

Service Page RAILWAY AGE

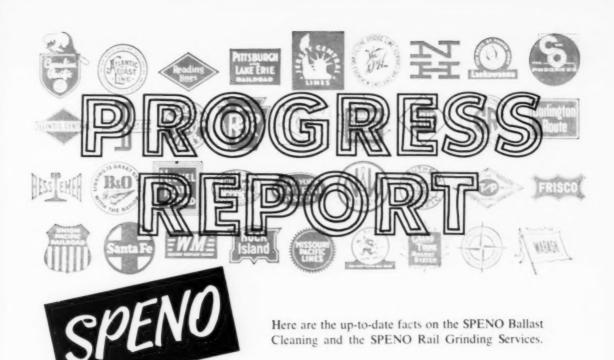
REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1989

(Dullar Aguses are stated in thousands: i.e., with last three digits omitted.)

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Green Bay & Western Green Bay & Western	Aug. Aug. Aug. Smos. Aug.	951 951 8,293 219 219	35,889 35,889 20,383 159,510 3,108	275	4,239 40,233 22,934 168,116 3,182	3,733 34,965 25,344 155,114 3,866	5,583 4,146 27,851 83 599	5,679 3,685 24,858 387	100	818 4.171 3.981 378		-			4,202 35,315 17,957 33,150 3,38	241 241 240 240 240 340	Language and the second	107.1 107.1 107.1 107.1 107.1 107.1	200 M	4.28 3.002 3.002 4.00 4.00 4.00 4.00 4.00 4.00 4.00	2,230	1.134 6.136 1.136 1.136 1.136
Golf, Mobile & Obio Illinois Central	Aug. Aug. Aug. Aug. Aug.		6,886 49,858 17,818 145,848 873 6,476	2,102 1,873 2,102 14,892	6,707 54,613 21,884 178,176 7,160	6,885 52,321 22,686 170,867 7,867	7,292 2,860 26,216 1110 852	24, 244 24, 244 24, 244 27, 27, 27, 27, 27, 27, 27, 27, 27, 27,		AR 70	1, 203 0,088 3,887 12,126 0,156 1,150	297 292 298 265 265			5,185 42,827 16,745 143,821 6,189	225 226 226 286 785 785	2770 2770 2770 2770 2770 2770 2770 2770		1,662 5,139 1,060 1,060	788 2.918 8.654 2.25	3,574 1,731 1,699	2,879 2,839 1,568 94 594
Kansas City Southern Kansas, Okishoms & Gulf Lake Superior & Ishpeming	Aug. Aug. Aug. Aug. Aug.	327 327 327 160 160	3,244 27,186 3,738 2,418 2,418	**	3,788 38,598 3,785 2,847	3,262 28,981 686 3,423 617 2,399	2,414	2,136 6.7 6.7 54.2 54.2 6.8 6.8	377	4,194 279 279 527	3,788 25 220 47 530		946 7886 33 277 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2.875 7.83 7.83 8.83 8.83 8.83 8.83 8.83 8.83	2,864	1,918 16,605 235 1,976 234 1,824	58.00 57.00 58.00 73.00 70 70 70 70 70 70 70 70 70 70 70 70 7		1.544 2.863 1.692 733	5,291 737 737 693	24.00 26.00 26.00	4,869 71 71 245 245
Lebigh & Budson River Lebigh & New England Lebigh Valley.	Aug. Aug. Aug. B mos.	1777	2,244 2,244 3,952 3,893 33,234	1,262	273 2,247 3,994 4,159 36,697	2,138 2,138 6,578 6,520 5,121 37,998	248 248 562 4.375 4.375	34 274 71 513 521 4,991	727.22	238 2388 1,3899 1,3899 6,390		-	15 128 18 18 18 138 138	111 894 216 2.263 2.263 19,577	1.636 523 6.027 3.638 33,363	267 3.867 1.686 2.367 2.367	72.8 72.8 98.3 98.3 96.8	71.6 778.6 89.9 89.5 92.1	75 611 88 8.394 3.394	257 275 275 3,665 3,666	777	11 225 1.040 2.938
Louisins & Arkanss Louisille & Nashville	Aug. Aug. Aug. Aug. S mos.	3.697 3.697 5.697	1,008 8,393 2,029 15,757 15,391 134,935	4,831 35,987 336 989 5,833	6,986 65,951 2,184 16,921 17,645 152,226	8,738 44,785 2,984 18,913 18,517	6,484 1,882 1,581 2,591 21,365	735 6,367 150 1,520 2,517 21,580			1,943 8,782 2,359 3,735 16,912 8	1,349 98 787 1,135 8,915 3	351 251 634 683 683 683	23,327 23,327 714 5,653 5,653 5,615	5.076 0.084 1.376 14.567 24.282	4.799 39,684 1.263 10.943 15,111	8883 8323 6232 6332 6332 6332 6336 8336 8	88.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8.8	1,003 5,287 8,287 6,224 3,137 7,944	3,636 3,286 3,286 2,535 0,551	349 252 271 2.289 1.336	388 672 286 1,989 1,757
Maine Central Minneapolis & St. Louis Minn., Northfield & Southern	Aug. Aug. Aug. Aug. Aug.	1,391	15,168 15,168 14,281 2,848	7.3	141.1 141.1	17,135 2,136 14,836 4,39 2,992	350 2,939 2,316 2,316 186	3.056 2.266 2.266 178	226 236 236 236 236 236 236	3,918 2,85 2,665 3,23	3,856 3,855 3,391 3,11	8.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	31 120 120 949 949 258 258	6,318 6,318 5,284 786	1.867 13.484 1.492 12.249 1.239 1.831	1.622 1.520 1.622 1.622 1.662	882.5 883.0 683.6 61.5 84.5 84.5 84.5 84.5 84.5 84.5 84.5 84	78.5 778.5 89.2 20.2	333 3,150 3,415 1,150 1,150	1,539	45.148.4 45.148.4	1.174 266 1.174 9.5 9.5
Minn., St. P. & S. Ste. Marle Missourl Illinois M.K.T Lines	Aug. Aug. Aug. Aug. B mos.	3,222 3,222 172 2,918 2,918	3,722 26,844 3,694 4,513 36,425	242 242 242 242 242	4,061 28,124 4,26 3,645 5,003	27.117 4.88 3.130 8.176	878 5,477 488 488 4,528	5,357 5,357 5,35 5,219			- "	125 125 363 263 263 1991 1.		11,520	25,143 25,143 2,312 3,740 30,162	23,991 30,3991 2,354 3,867 30,296	746.88	774.3	2,979 1,333 1,352 0,195	2,269 1,21 1,819 3,762	244 145 73 716 329 2,818	786 959 698 893 3,825
Missouri Pacific. Monon Monongabela	Aug. Aug. Aug. Aug. Aug.			3,590	25.699 264.5999 11.5484 3.428	24.021 190.558 1.662 12.937 453 3,120		3,549 28,944 256 1,745 536	-		4,026 53,296 2,286 2,258 446	612 612 88	898 898 814 8	9,695 1,643 1,373	19,506 54,758 1,319 11,341 2,511	18.668 49.288 1.487 11.823 2.379	27.80.00.00.00.00.00.00.00.00.00.00.00.00.	776.9 776.9 773.6 775.0	2225	2.494 7.389 7.46 7.46 1.8	2,737 2,943 76 768 130 345	3,001 10,400 1,003 1,10 3,47
	Aug. Aug. Aug. Aug. Aug.	10,361 10,432 221 2,170 2,173		8,961 47,967 274 1,137	51,387 664,183 1,085 23,165 10,570 101,374	55,788 421,617 2,945 20,827 12,067 89,880	5,730 69,982 338 3,019 1,286	5,522 67,182 3,433 1,263 10,291	-	11,100 16,778 1,850 1,850 16,778	76,400 19 984 19 7,105 2 15,325 3	2,438 9,155 9,155 2,699 3,694 2,699		25,247 218,274 8,868 4,418 38,268	45,948 387,877 1,852 21,197 8,354 73,000	45,719 149,145 2,684 21,264 8,468 68,577	89.4 883.6 70.7 779.1 773.0	882. 887.5 706.2 706.2	5,447 76,386 2,857 2,214 18,374	5,996 (7,199 3,917 1,849	1,996 7,553 1113 6,846 756 1,335	2.978 6.319 96.3 1.385 7.96.5
New York, N. H. & Hartford New York Connecting New York, Sus. & Western	Aug. Aug. Aug. Aug. S mos.	221.221.221.221.221.221.221.221.221.221	5,593 53,116 2,475 2,424 2,424	31,033	10,883 97,791 2,694 3,684	12,385 97,648 2,846 3,736	11.570 11.746 77 503 42 331	11,902 11,902 1182 968 310	2,295	\$\$=E8\$	3,398 3,398 16 135 48 48	724	522	5,677 67,411 710 1,377	83,009 1189 1.354 301 2,444	10.200 83.668 288 1.836 2.993 2.466	10.5.5	882.7 883.7 91.8 90.2	1,346 1,346 246	1,993 7,993 788 788 255	1,531 4,669 3,45 3,20 3,20 3,20 3,20 3,20 3,20 3,20 3,20	3,971

(Continued on page 32)



BALLAST CLEANING

SPENO Engineering and Research has developed a superior screening arrangement so that we are now using an improved Ballast Cleaner with greater efficiency.

RAIL GRINDING

Our Rail Grinding Service has been so well received we are now building a *THIRD* Rail Grinding Train to take care of the increased demand.

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FRANK SPENO RAILROAD BALLAST CLEANING CO., INC.

Clark Street East Syracuse, N. Y. 306 North Cayuga St. Ithaca, N. Y.

Page Service RAILWAY AGE

REVENUES AND EXPENSES OF RAILWAYS

Dollar States are stated in thosopids i.e. with line three digits omitted MONTH OF CALEDOR YIAR 1438

MONTH OF ALGEST AND ERGHT MONTHS OF CALEDOR YIAR 1438

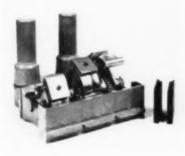
MONTH OF ALGEST AND RICHARD MONTH FAUNDMENT

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March									The same of	0 0 0 0 0 0 0 0 0	A	STATE OF	E.A.B. 1	100								
The color of the	Name of Road folk & Western folk Southern ribern Pacific	Aug. Mos. Aug. Aug. Mos.	Average operated during period 2,138 2,138 2,138 6,833 6,833		Revenue 1959 1959 18,293 18,483 17,038 12,060	1958 1958 182,8899 1837 5,859 17,825 112,689	Maint 1959 1,568 1,583 1,517 1	May at 1958 2,816 17,592 1,636 1,995 15,562	*	2	Total 1958 1.658 26.571 117 2.560 1.898	ng kypen Deprec and and Retire- ments 8,896 8,896 774 6,876		Frans- ortation 4 254 87 293 262 2 1 1 6 6 2116 47 465	Total 1959 9 424 84.292 696 5 591 91.575	1058 1058 93,295 8,322 11,703	ATE GRAMME		Net from sallon eration a 5.869 1.151 141 141 812 8 84 8 84 8 84 8 84 8 84 8 84 8 84 8 8	Railmay f-13 accurals 2.8-57 2.8-124 435 2.451 15.343	Net 1 1989 4.346 82,818 1,451 8.952	Railway crating 1958 12,336 18,346 18,346 18,346
The control	thwestern Parific inc Electric	Aug. Aug. B mes. Aug. 8 mes.	328 328 361 360 9,920 9,920	48.811 48.811 48.811		1,256 7,813 1,948 8,372 73,873 543,612	286 1,697 1,697 1,481 6,654 99,264	2,024 1,342 7,061 60,981	***		6.50 6.50 6.50 6.70 6.70 6.70 6.70 6.70 6.70 6.70 6.7	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		3.739 6.883 31.386 272.628	5, 893 7, 498 56, 883	8 98 8 7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8	-00000	-	6.00.7 2.00.7 2.00.9 6.01.5	2558 1 554 1 36 6,835 5,485	2012 2012 2013 2013 2013 2013 2013 2013	370 304 378 5.647
	nReading S. N. Lines dmont & Northern taburgh & West Virginia	Aug. Aug. Aug. Aug. Aug.	333	3,423	5,452 4,58 3,748 5,689	8,461 4,264 5,265 5,265	21.7 8.885 6.0 3.886 1.15.7	1,661 49 379 1,679	8452 373 373 373 373 373 373 373 373 373 37	1,052 276 276 1,284	123 969 369 225 157 1,191	207 207 10 76 76 86 863	243 243 653 663	3,929 3,929 712 186 1,779		888 218 744 686	000000		218 1982 198 1895 203	978 978 975 Cr.66	8,775 897 887 887 889	3,260
The column The	binond, Fred. & Potomac rland	Aug Aug Aug B mos Aug B mos	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	62 854 1 205 1 177 2 877	7,570 71,735 16,1951 3,952 3,087		9,047 1,198 1,198 1,198	1,859 9,835 1,332 579 579	1,557	1,553 13,916 2,309 54 478	12.799 12.799 2.270 488 460	3,795 67 67 529 18 182	1,542 235 285 285 261 261	3.639 3.115 6.75 5.733 1.360 1.267	60,938 60,343 10,722 2,826 2,826	6.988 0.628 1.388 10.929 2.752			5.472 5.472 26.3	3,455 3,455 417 3,185 239	3.096 2.096 1.591	4,936
Note	Louis-San Francisco r. Louis-S. F. & Texas Louis Southwest. Lines	Aug 8 mos Aug 8 mos Aug 8 mos	4.558 4.571 4.571 4.556 4.556	25.85 25.85		9,443 72,982 3,28 2,910 4,678 38,831	12,567 12,567 212 212 585 4,737	1,646 10,417 354 354 5,510	1,480 3,88 3,8 8,8 8,8 8,8 8,8 8,8 8,8 8,8 8,	1,776 13,682 31 222 705 5,299	12,482 12,482 197 197 5,470	4, Nee 1, 196 1, 525	355 2,849 182 185 182 1,568	4.076 N.381 1.227 1.227 1.707	8.408 65.407 251 1.940 3.356 27.611		0-2074	Everen	5,168 5,168 1,583 2,218 5,480	8,431 96,979 1,119 7,539	7.721 7.3 680 680 7.064	2.0 E 3.0 E
Trunchering Anna	annah & Atlanta. Doard Air Line athern Railway	Aug. 8 mos. 8 mos. Aug. 8 mos.	6,269 6,269 6,269	2.688 10,555 90,036 19,303 158,269		2,525 12,476 102,493 21,360 164,301	37 418 1,754 13,669 2,352 23,040		2,679 2,679 2,528	61 26.7 26.7 59.0 73.9 86.9		134 693 693 7,600 7,600	1.54 4.50 3,6.30 48.3 3,911	1.62 4.780 58.789 7.216 56.855	2,968 9,843 N1,270 115,838		-2-5-4	reanse	2,919 2,919 7,853 4,838 2	234 1,240 1,540 3,292 1,790 2,790	324 2.854 3.289 5.267	336 1.847 2.926 23.176
Note	labama Great Southern Inn., N. O. & Tex. Pac. Georgia Southern & Fla.	Aug. Aug. B mos. Aug. S mos.	25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	24.789 2.789 24.789 5.957 5.957	11,190 3,245 27,078 861 6,876	1,616 10,302 2,826 23,945 6,129	1,947 575 4,612 985	254 1,965 6,755 1,250	2 2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	285 2,602 693 5,716 158 717		8.555 2.233 1.778 84	323 823 80 851 23 183	3,935 7,957 7,957 2,162	1,058 9,559 19,610 4,537		****		1.531 850 7.463 2.335 2.339	3,394 3,394 3,494 367	5,051 472 472	3,359
National Color	cas & New Orleans	Aug. Aug. Aug. S. moss.	203 203 3,965 8,162 6,162	8,891 39,553 331,750 10,722 87,465	940 7,749 45,591 371,689 11,722 94,854		1,553 8,553 82,844 1,897	182 1,460 5,188 41,944 1,854 14,827		196 611 735 755 483 1	1.583 9.998 73.687 1.642	2.892 9.788 9.788 1.288 1.578	27 216 826 6,456 248 2,039	244 953 923 645 645	716 893 243 348 858 651			nenenz	224 1,656 8,343 4,331 4,463	1.172	102 3,005 3,689 6,435 8,433	29, 144 29, 144 29, 265 30, 26
Autor 1,851 8,748 8,748 8,845 8,54	skane international skane, Portland & Seattle unessee Central	Aug. Aug. Aug. Aug. Aug. Aug.	284 284 284 284	2.548 2.548 20.729 3.729 2.540			86. 3,593 3,593 3,593	37 471 3,562 46 336	# 47.50 A	2.3 2.06 4.97 3,784 5.0 4.1.1	3,697	1,027 1,027 173	40 278 278 138	78 604 1,100 8,170 123	1,299 2,150 16,790 254 2,062				2758	2,551 2,656 137	2,853 2,853 2,853 184 184	2,575
Notes \$7.545 \$8.571 \$3.454 \$4.524 \$4.705 \$4.524 \$4.575 \$4.577 \$4	as & Pacific as Merican tedo, Peoris & Western	Aug. Aug. 8 mos. Aug. 8 mos.	1,831 161 161 239 239	6.748 42.578 2.273 4.991	50,869 50,849 2,522 5,153	5,885 47,634 2,572 4,986	6,746 6,725 471 86 619	6,354 459 459 80 80	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1,069 8,492 268 49 49	991 8,679 265 46 46	2,181	1,644 1,644 100 50 402	2.5880 20.733 95 7.83 1.71 1.356	60.531 221 1.765 3.121		74.0 774.0 57.0 6.0 6.0 6.0 6.0		888 75 787 298 2,032	3,745 3,745 364 131 871	2,514	2,232
Name	ion Pacific ginian bash	Aug Aug Aug Smos Aug Aug	9,743 9,748 6,088 2,392 2,392	267,957 297,957 29,758 29,755 20,757 89,672	43,411 342,090 3,937 31,062 9,413 80,408		5,123 41,703 433 3,992 9,703	6,377 63,887 628 3,581 8,670 8,670	4, 527 6, 574 6, 574 1, 6, 54	7,754 65,258 8,924 1,558	8,104 69,671 572 5,490 1,480	2,229 17,470 285 2,271 448 3,580	1.140 9.938 502 272 2.782		32.369 255.811 2.124 17.885 7.562 64.983	33,003 241,883 17,996 77,834 60,355	25 2 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	25.55 K	1,043 6,279 1,813 1,851 5,425	5,948 937 6,830 5,255	2.474 23.005 1.1.21 8.508 3.894	5,648 1,371 8,812 456 2,728
Anna. 1.831 28,796 186 22,174 28,977 2,749 546 3,756 189 189 1.133 2,288 2,891 18,794 1.581	atern Marstand stern Pacific		294 294 844 1,188	5,728 3,887 3,887 3,883 3,983 3,983			90 720 4,342 7,67 4,456	92 6.31 6.11.3 6.6.36	P 4 8 8 9 7 7 7 7 8 8 9 7 7 8 8 9 7 7 8 8 9 7 7 8 8 9 7 7 8 8 9 7 7 8 9 8 9	1.282 7.50 6.444 6.889 5.543	1.244 6.937 6.933 6.933 5.374	23.186 2.186 2.22 1.737	35 276 1,011 1,936	365 1,994 10,480 1,644 12,819		5,150 2,758 22,783 26,000	87.9 90.9 75.3 75.5 76.5	788 784 784 784 784 784	541 541 7.846 611 8.426	0.5 45 8 8.5 28 8 8.5 28 8 8.5 28 8	6,246 5,246 4,267	5,784 1,115 4,280
	sconsin Central	Aug. 8 mos.	-		22,174		3,077	2.740	346	3,726	3,564	110 869	109 815	9,491				71.7	3,879	1,551	N24	539

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New Products Report







Shuntless Brushholder

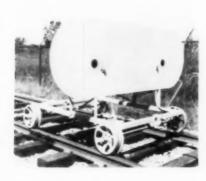
The Ringsdorf brushholder features grooved split brushes and a rubber cushioned pressure finger. It is said to increase brush life because it provides constant pressure, eliminates brush changes and flashovers due to shunt troubles and reduces brush cost about 30%. Silver inlay provides positive brush contact. Holder boxes are demountable. Pittsburgh Carbon Div., Ringsdorf Carbon Corp., Dept. RA, P. O. Box 22, East McKeesport, Pa.

Loop Current Control

The type 238 loop current control is designed as a current normalizer in de teleprinter signal loops. It automatically maintains loop current at the optimum value despite changes in loop resistance or supply voltage. Model 1 is for use in nominal 60 ma loops, and model 2 is for 20 ma loops. Both models incorporate a calibration control to allow variations from the design values. Northern Radio Co., Dept. RA, 147 West 22nd St., New York 11.

Voice Circuit Test Set

The type 601A weighting network adapts any good quality, high impedance, VTVM to read F1A curve-weighted noise measurements. A three-toot connecting cord with shielded banana plugs is furnished. The meter reading is subtracted from a calibration factor to obtain noise measurements in dba. The set provides an insertion gain of 10 db, and can measure noise as low as 10 dba. Lenkurt Electric Co., Dept. RA, San Carlos, Cal.





Electronic Track Raiser

Operation of a jack tamper is made completely automatic by use of the new Pullman-Standard electronic track raiser. Consisting of a projector unit (left) and a receiver unit (right), it utilizes a beam of light and photo-electric cells to raise track to perfect surface and cross-level. The projector unit operates on corrected track behind the receiver unit which sits on uncorrected track. The two units are connected to each other and the latter is connected to the tam-

per. When irregularities in track surface at the jacking station are encountered the photo-electric cells on the receiver unit are moved into the path of the light beam from the projector unit. This actuates the jacking mechanism of the tamper which continues until the cells are moved out of the light beam. A cam device on the receiver unit permits automatic "run-ons" and "run-offs." Pullman-Standard, Dept. RA, 200 S. Michigan Ave., Chicago 4.

Short Haul Trunk Carrier

The B-630 is a low cost short haul carrier telephone system providing up to 12 toll quality circuits between 40 and 416 kc. Also available is a fully transistorized amplifier designed as a one-way cable repeater to make up cable losses. Power for the polemounted repeaters is supplied over the carrier pair. The system uses an angular modulation principle. Lynch Carrier Systems, Inc., Dept. RA, 695 Bryant St., San Francisco 7.

New Consolidated Code Ready

▶ The Story at a Glance: Railway operating conditions and methods change—and the operating rules are keeping pace. Effective Dec. 1, 14 western railroads will adopt a new Consolidated Code of Operating Rules. The 232-page book represents the first major upgrading of the rules since 1945 for eight of the lines involved. The other six are becoming parties to the Consolidated Code for the first time.

Improvements in technology — dieselization and increased use of CTC and train radio, for example—account for many of the changes in the new code. One major revision: Rules in effect after Dec. 1 don't recognize the job of locomotive fireman.

Fourteen years of progress in rail-roading have been taken into account in a new rulebook which contains just 14 more pages than the old book it supercedes. But sweeping changes have been made. Old rules, appropriate to steam operation, have been dropped. In their place are new sections on CTC (Rules 265-273) and train radio (Rules 400-417). An indication of the amount of change made: One road's comparison of the new book to the 1945 code runs to 60 8½-by-11 inch pages.

Many revisions, major and minor, have been made in the interest of clarity. Others reflect the changes in railroad crew job descriptions which advancing technology has brought. Like C&O, which issued a revised rulebook last year, the Consolidated Code roads found it possible to cover engine crew rules without mention of the locomotive fireman.

The change is significant in view of U.S. roads' current efforts to win the same right Canadian roads now have: to assign firemen at management discretion on other-than-steam power and thereby begin the elimination of the fireman from freight and yard service. Under the new Consolidated Code, whatever place firemen occupied under the old code has been reassessed and reassigned along these lines:

Rule 204 now provides that engineers must show copies of orders and clearances "to members of the crew on the engine." The 1945 code specified "firemen and when practicable... forward trainmen."

• Rule 211, pertaining to Clearance Form A, takes a similar slant in referring to "members of the crew" instead of "firemen and trainmen."

• New Rule 803 combines responsibility of enginemen and trainmen in observing signals, maintaining safety lookout, keeping abreast of orders. A new paragraph provides that: "When conditions or signals require that the train be stopped or speed of train be reduced, and the engineer or conductor fails to take proper action to do so, or should, the engineer become incapacitated, other members of the crew must take immediate action to stop the train."

• The first part of old Rule 922 has been dropped (it covered duties of the firemen). Rewording of the rule provides that: "The engineer is responsible for the safe and efficient operation of the engine in his charge and all persons employed thereon must obey his instructions. Engineers must not permit any unauthorized person to handle the

Several other rules touch on the fireman situation indirectly. One requires the head-end trainman to ride in the lead engine cab in freight service unless otherwise provided. Another requires signals to be given from the engineer's side of track, when practicable.

Other changes include the listing of rules for signalmen under the heading "Operators" in the 600 series; and the eliminating of separate headings and combining of several rules for agents and operators.

Employees of 14 companies will be bound by the new code: Milwaukee; Great Northern; Northern Pacific; Union Pacific (Oregon Division); Soo Line: Minneapolis & St. Louis: Davenport. Rock Island & North Western; Des Moines Union; Duluth, South Shore & Atlantic; Minneapolis, Northfield & Southern: Minnesota Transfer; St. Paul Union Depot; Spokane International, and Spokane, Portland & Seattle. Six of the 14 roads-M&StL, MN&S, DRI&NW, Des Moines Union, MT and St. Paul Union Depot-are becoming parties to the code for the first time.

North American, Emery Offer New TOFC Package

A new piggyback "package" will be offered to shippers who want to take advantage of low Plan IV TOFC rates between the city of Chicago and the Pacific Coast.

North American Car Corp. and Emery Transportation Corp. have set up a new company (North American-Emery Corp.) to provide the service. The TOFC package: An 85-ft flat car and two 40-ft insulated trailers with all-purpose mechanical refrigerator units.

Initially, North American will supply the cars and Emery the trailer units. Each will provide funds to purchase additional trailers that will be needed after that.

HAYES No Hayes Wheel Stop is bolted or clamped to the rail. Impact is absorbed by a lower projection pushing a tie in the ballast. The ballast provides gradual resistance, and the car is stopped without damage. Hayes Track Appliance Co., Richmond, Ind.

Carloadings Drop 3.2% Below Previous Week's

Loading of revenue freight in the week ended Oct. 31 totaled 588,148 cars, the Association of American Railroads announced on Nov. 5. This was a decrease of 19,199 cars, or 3.2%, compared with the previous week; a decrease of 86,843 cars, or 12.9%, compared with the corresponding week last year; and a decrease of 125,846 cars, or 17.6%, compared with the equivalent 1957 week.

Loadings of revenue freight for the week ended Oct. 24 totaled 607,347 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE For the weel District Eastern Allegheny Pacahontas Sauthern Northwestern Central Western Sauthwestern		AR LOADI aturday, O 1958 95,887 113,393 53,205 121,716 96,698 137,715 56,231	
Total Western Districts	265,065	290,644 674,845	281,153
Commodities: Grain and grain products Livestock Coal Coke Forest Products Ore Merchandise I.c.I. Miscellaneous	67,205 11,705 112,255 3,362 40,578 10,988 42,503 318,751	66,268 12,138 117,110 8,039 40,570 47,176 47,396 336,148	46,217 12,397 134,417 9,599 37,674 62,923 53,600 346,861
Oct. 24 Oct. 17 Oct. 10 Oct. 3 Sept. 26	607,347 580,768 558,780 572,502 587,079	674,845 696,403 686,521 677,525 673,380	703,688 726,812 741,520 747,647 739,266

Cumulative total, 43 weeks ... 25,624,208 24,901,471 30,055,905

PIGGYBACK CARLOADINGS.

—U. S. piggyback loadings for the week ended Oct. 24 totaled 9,009 cars, compared with 6,705 for the corresponding 1958 week. Loadings for 1959 up to Oct. 24 totaled 341,107 cars, compared with 221,554 for the corresponding period of 1958.

IN CANADA. — Carloadings for the seven-day period ended Oct. 21 totaled 87,857 cars, compared with 74,955; cars for the previous sevenday period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Rec'd from Connections
Oct. 21, 1959 Oct. 21, 1958	87,857 81,756	27.955 27.071
Cumulative Totals: Oct. 21, 1959	3,129,814	1,133,894

New Equipment

FREIGHT-TRAIN CARS

► Repair Ratio 0.1% Higher Than Last Year.—Class I roads on Oct. 1 owned 1,695,267 freight cars, 42,058 less than a year ago, according to AAR report summarized below. Repair ratio was 0.1% higher than on Oct. 1, 1958.

	Oct. 1, 1959	Oct. 1, 1958	Change
Car ownership	1,695,267	1,737,325	-42,058
Waiting repairs	144,040	145,692	- 1,652
Repair ratio	8.5%	8.4%	+ 0.1%

LOCOMOTIVES

▶ 708 New Units Installed in First Nine Months.—Class I railroads installed 708 new locomotive units (704 diesel-electric; four gas turbine-electric) in the first nine months of 1959, according to the AAR. In the corresponding period of 1958, they installed 338 units (335 diesel-electric; three gas turbine-electric). New locomotive units on order Oct. 1 totaled 229, of which 206 were diesel-electric and 23 gas turbine-electric. On Oct. 1, 1958, Class I railroads had 403 new locomotive units on order, of which 376 were diesel-electric and 27 were gas turbine-electric.

► Locomotive Ownership and Condition.—Class I roads owned or leased 28,165 diesel units on Oct. 1, an increase of 543 units over Oct. 1, 1958, according to AAR quarterly summary; steam locomotive ownership was reduced by 657.

	Owned o		Stored Se	rviceable t. 1	Waitin	g Shops
	1959	1958	1959	1958	1959	1958
Diesel (Units)	28,165	27,622	837	654	1,602	1,367
Steam (Locomotives) .	875	1,532	338	561	446	540
Electric (Units)	541	559	68	50	8.5	85

New Facilities

► Canadian Pacific.—Ordered equipment from General Railway Signal Co. for the installation of 24 miles of CTC between Revelstoke and Taft, B.C. Control will be from a triple-decked track diagram control machine at Revelstoke, which will have capacity to handle traffic control on two subdivisions.

► Chicago & North Western.—Current construction projects involve expenditure of approximately \$1,192,250. Major items in the program: Construction of mechanical and car department facilities, Beverly, Iowa, \$198,105; two new yard offices, Proviso, Ill., \$177,900; conversion from dc to ac current, Chicago, \$143,810; revision of interlocking, Otis-Beverly, Iowa, \$131,220; conversion to single main, Chittenden-Layton, Ill., \$119,285.

► Great Northern—Signaling improvement program for 1960 includes installation of CTC over 200 miles of main line in eastern Montana; and extension of existing CTC between Delano and Wayzata, Minn.. ٥

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James M. Symes



Allen J. Greenough



Park M. Roeper PRR



A. Mosby Harris PRR



Robert B. Oppenheimer North American-Emery



Robert D. Innes Electro-Motive Division

People in the News

ALASKA.—Russell R. Mack, chief clerk—operations, appointed assistant personnel officer, Anchorage, Clarence Krouse, agent at Palmer, appointed traffic representative, Anchorage, succeeding R. R. Hughes, retired because of ill health.

ASSOCIATION OF AMERICAN RAILROADS.—Alfred P. Kivlin, chief engineer, Freight Loading and Container Bureau, Chicago, retired Sept. I.

BALTIMORE & OHIO.—Thomas E. Reese, superintendent of mail traffic, Baltimore, retired Oct. 31.

CHESAPEAKE & OHIO.—C. B. Porter appointed general real estate agent, Huntington, W.Va., succeeding R. O. Robertson, who retired Oct. 31. Abolished position of assistant general real estate agent, formerly held by Mr. Porter, M. E. Sondridge, road foreman of engines—assistant trainmaster, Clifton Forge, Va., appointed supervisor diesel operation, Russell, Ky., succeeding Homer Fuller, retired, C. M. Booker appointed trainmaster, Alleghany subdivision, Clifton Forge, succeeding J. W. Lilly, retired.

Benson T. Buck and Preston C. Shonnon appointed commerce atterneys at Detroit and Richmond, respectively, Louis J. Mott appointed administrative assistant to general counsel, Richmond.

CHICAGO & NORTH WESTERN.—Ray A. Kennord appointed mechanical and air brake instructor, Chicago.

E. Hector Cooles appointed assistant director of real estate sales, Chicago, He was formerly director of sales for the Hotel Shoreland, Chicago,

COTTON BELT.-R. D. Klein, assistant industrial commissioner, Dallas, named manager of industrial development, Tyler, Tex., to succeed M. H. Sprogins, who retired Nov. L.

R. M. Hubbord named district freight and passenger agent, Shreveport, La.

ERIE.—Frederick M. Klitz, freight traffic manager, New York, appointed assistant vice president—freight rates at that point, succeeding Fric C. Hollberg, retired. Merbert C. Well, freight traffic manager, Chicago, transferred to New York, Leonard M. Schukei, assistant freight traffic manager, Chicago, succeeds Mr. Well. Thomos Gilpin, general freight agent, New York, replaces Mr. Schukei, Edword R. Hilpp appointed assistant general freight agent, New York, succeeding Fronk K. Noonburg, who replaces Mr. Gilpin.

GREAT NORTHERN.-Joseph L. Tierney, district

passenger agent, New York, appointed general agent, passenger department there, replacing Henry Deissler, retired. Mr. Tierney's successor is H. Wolter Heyer, city passenger agent, New York.

GULF, MOBILE & OHIO.-W. A. Bender, assistant to vice president and general manager, Chicago, retired Oct. I.

R. P. Tollmon, southwestern traffic manager, New Orleans, La., appointed general freight traffic manager, Mobile, Ala., succeeding John H. Wolkmeyer, who retired Oct. 31. E. B. Kelly, assistant freight traffic manager, New Orleans, succeeds Mr. Tallman, H. W. Thomson named assistant general freight agent (foreign department), Mobile, W. T. Boordmon, manager foreign freight department, Mobile, retired Oct. 31. D. F. McCullough, general freight agent, New Orleans, succeeds Mr. Kelly.

MILWAUKEE.-Effective Nov. 1, E. E. White appointed assistant to traffic manager, Seattle, Wash., succeeding J. H. Agner, retired.

FENNSYLVANIA.—Jomes M. Symes, president, appointed chairman of the board and chief executive officer, effective Nov. 1 (RA, Nov. 2, p. 10). Allen J. Greenough, vice president—transportation and maintenance, named president and chief administrative officer. Pork M. Roeper, general manager transportation, succeeds Mr. Greenough. A. Mosby Horris, regional manager, Buckeye region Cincinnati, Ohio, replaces Mr. Roeper. Howard C. Kohout, assistant regional manager, Lake region, succeeds Mr. Harris.

Kenneth M. Lockerby, engineer, communications and signals, Pittsburgh region, Pittsburgh, named engineer, signals and catenary, Philadelphia, succeeding Frank L. Chotton (RA, Oct. 19, p. 39). V. E. Wonneg, supervisor communications and signals, Baltimore, succeeds Mr. Lockerby, J. A. Eurly, supervisor, Pittsburgh, transferred to Baltimore, P. V. Annonio, supervisor, Baltimore, appointed supervisor, Cincinnati, succeeding G. F. Loser, transferred to Pittsburgh, R. C. Ryberg, assistant supervisor, Canton, Ohio, appointed supervisor, Cleveland,

H. D. Morris named manager, special equipment, Philadelphia.

OBITUARY

Charles P. Fauntz, 79, retired assistant chief engineer, Illinois Central, died Oct. 24 at Clarksburg, W.Va.

V. J. Thompson, assistant vice president-

Supply Trade

Robert B. Oppenheimer, manager of coordinated services, North American Car Corp., has been elected president and general manager of the newly formed North American-Emery Corp.

operations, Gulf, Mobile & Ohio, Mobile, Ala.,

Robers D. Innes, assistant director of public relations. Electro-Motive Division of General Motors Corp., has been appointed director of public relations, to succeed the late Volney B. Fowler (RA, Oct. 12, p. 38).

William R. Hamilton, Jr., has been appointed research engineer of the Rail Joint Co., Division of Poor & Company, New York, effective Nov. 1

The National Cylinder Gas Division of Chemetron Corp. has announced appointment of seven special sales representatives to handle sales to railroads of NCG rail welding services and other railroad equipment and to supply certain NCG lines, including welding, cutting and other industrial equipment. Companies appointed and personnel are: R. E. Bell Co., 2089 Railway Exchange Building. St. Louis Richard E. and Richard H. Bell Eastern Railway Supplies, Inc., 110 E. Street, New York-John W. Samson, W. H. Bahrenbury and Harry A. Doyle; Ston M. Hoigh Co., 333 First Federal Building, St. Paul Stan H., Jerry and Tom Haigh: Donald J. Hogan & Company, Inc., 2754 Woodhill Road, Cleveland D. J. Hogan, J. H. Callahan, J. F. Moran and J. M. Norton; Stonley M. Smith & Co., Inc., 2754 Woodhill Road, Cleveland—Stanley H. Smith, E. H. Ricketts, J. J. Clark, J. B. Powell and J. M. Bina; Southeastern Railway Supply, Inc., 2304 Wilson Blvd., Arlington, Va.—W. Conroy Wilson, J. B. Akers and Martin E. Perdue; Don N. Roddy & Company, 1031 14th Street, Denver Don N. Roddy.

Charles W. Plunkett has been appointed operations manager for Motisa Equipment Corp. and its subsidiary Motisa Railweld, Inc. Mr. Plunkett was formerly operations manager of the latter company only. Parker Hills has been named superintendent of Matisa Railweld, John Segolo, design engineer, has been appointed assistant to operations manager.

Glenn E. Stinson has been appointed sales engineer for Union Switch & Signal—Division of Westinghouse Air Brake Co. at the Chicago district office. After service with the Rock Island Mr. Stinson joined US&S as application engineer, Interlocking Section, Project Engineering Department, the position he held until his recent appointment.

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'Mixed-Up Economy' Hit By CPR President Crump

A "mixed-up economy" ("part free enterprise, part socialist") affects transportation in both the U. S. and Canada, says Canadian Pacific President N. R. Crump.

In both countries, much of the capital allocated to transportation is by government edict and many of the prices charged for transportation are subject to government control, Mr. Crump told the annual meeting of the Delta Nu Alpha Transportation Fraternity in Pittsburgh, Oct. 31.

"This is the so-called mixed economy—part free enterprise, part socialist," he said. "It is surely a mixed-up economy and the amount of study being given to transportation in both our countries testifies to that."

He suggested that the market is a better mechanism for the allocation of capital to productive purposes than is government decree. "The market imposes a penalty for bad judgment and offers a reward for good judgment... The consumer exercises the discipline of the market."

Mr. Crump conceded that government must allocate capital to some transportation facilities that do not lend themselves to investment through private enterprise, but he said that government should be subject to the same discipline as private enterprise—the discipline of the consumer.

"If the consumer wants these facilities, let him pay for them as a consumer and not as a taxpayer. If government fails to impose user charges sufficient to cover capital costs as well as operating and maintenance expense, not only are these costs added to the taxpayers' burden, but private capital is driven away from investment in competing facilities; for it's a great handicap to compete against an enterprise that gets a substantial part of its capital at little or no cost."

Dividends Declared

DAYTON & MICHIGAN.—8% preferred, \$1, quarterly, payable Jan. 5, 1960, to holders of record Dec. 15, 1959.

EAST PENNSYLVANIA -\$1.50, semiannual, payable Jan. 19, 1960, to holders of record Dec. 31, 1959

ELMIRA & WILLIAMSPORT.—preferred, \$1.62, semiannual, payable Jan. 4, 1960, to holders of record Dec. 18, 1959.

GREAT NORTHERN -75c, quarterly, payable Dec. 1 to holders of record Nov. 9.

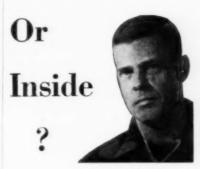
ILLINOIS CENTRAL -50¢, quarterly, payable Dec. 15 to holders of record Nov. 4.

MOBILE & BIRMINGHAM -4% preferred, \$2, semiannual, payable Jan. 2, 1960, to holders of record Dec. 1, 1959.

NORFOLK & WESTERN.-\$1, increased; \$1, extra, both payable Dec. 10 to halders of record Nov 13.

READING COMPANY.—4% non-cumulative 1st preferred, 50¢, quarterly, payable Dec. 10 to holders of record Nov. 10.

Outside



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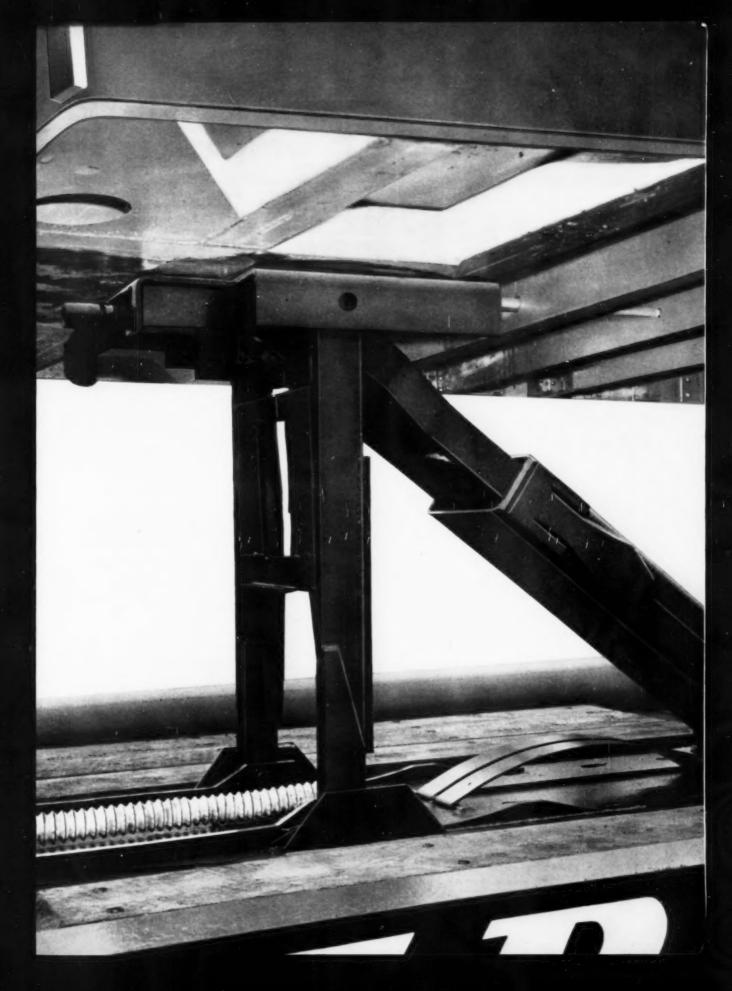
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You Ought To Know...

An electronic device that uses train radio to provide closer control of slack movement in long freight trains has been tested on the M&StL. President A. W. Schroeder mentioned the test in a speech at Des Moines, Iowa. The device, which produced "encouraging results." is now back in the cooperating suppliers' labs for further study. A spokesman for one of the supply companies involved emphasized that the device, and the tests, are "strictly experimental at this time."

CTC will govern train operations on Southern Pacific's entire Los Angeles-El Paso main line (813 miles) by mid-1960. Another 75 miles of CTC will be in service east of El Paso by the same time. SP's most recent CTC installation: Mescal, Ariz., to Anapra, N. Mex.

Recall of 591 shopmen was announced last week by the Baltimore & Ohio. Object, said B&O President Howard E. Simpson, is to "speed up work on equipment needed to handle the freight traffic upsurge which will follow the end of the steel strike." This brings to 2,303 the number of mechanical employees recalled by the road since September.

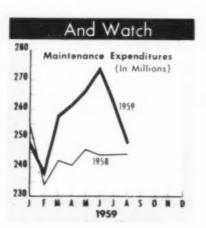
The 6.57-mile Indiana Northern's physical properties were sold to the New Jersey, Indiana & Illinois (part of the Wabash system) effective Nov. 1. Purchase price: \$90,000. The IN is a terminal switching road serving 12 industries at South Bend, Ind. Its former owner: The Oliver Corp., manufacturer of agricultural implements and machinery. IN has posted a loss every year since 1953, but NJI&I anticipates it can be operated profitably as an extension of an existing carrier already fully equipped to give identical services.

PRR's taxes per share last year amounted to \$4.77—compared with net earnings per share of 27 cents, the road's vice president—finance, David C. Bevan, told an Altoona, Pa., audience. Mr. Bevan conceded that last year was "the second worst in our financial history," but added: "That does not alter the fact that a large chunk of the tax bill was on fixed plant, which our competitors get for free. It is a rare year indeed when taxes alone do not exceed earnings."

New president of the American Train Dispatchers' Association is R. C. Coutts, who moves into the top job after 12 years as an ATDA vice president. Mr. Coutts succeeds J. B. Springer.

Pre-fabricated track is being used almost exclusively in construction of the New York Central's new \$12,500,000 Avon Yard at Indianapolis. All of Avon's 70 miles of track are being laid with panels and pre-assembled switches, with the exception of the hump and ladder tracks.

Santa-bound youngsters en route to a pre-Christmas tour of city stores are getting a break from Missouri Pacific—25-cent round-trip fares, applicable to nine MoPac cities on the three weekends before Thanksgiving and Christmas. Youngsters must be accompanied by adults—who may purchase round-trip tickets for the price of one-way fare. Reduced fares will apply to St. Louis, Kansas City, Houston, Beaumont, Omaha, Wichita, Memphis, Little Rock and San Antonio.



Passenger service began on Canadian National Railways' new branch between Chibougamau and St. Felicien, Que., Oct. 28. CNR President Donald Gordon was at the controls of the first train as it pulled into St. Felicien. The newly completed 133-mile stretch between St. Felicien and the Beattyville-Chibougamau line gives the Chibougamau mining center a short route to Quebec City and Montreal.

"A letter from 'the Old Man' " to all Delaware & Hudson Railroad emplovees was distributed last week by D&H President William White. Mr. White gave a straightforward account of "the railroad situation, the need for reducing our costs of doing business, the impossibility of increasing our freight rates without losing a lot more business [and] the jeopardy in which railroad employment is placed by wasteful practices." Stressing the point that the railroad industry, which includes all of its employees, is in the jaws of a dilemma, Mr. White's comments on work-rule changes concluded with the assurance "that railroad management asks only for a good day's work for a good day's pay."

Economic impact of the St. Lawrence Seaway in the Chicago area has not lived up to optimistic estimates. Earlier forecast of 250,-000 new jobs in the area as a result of the waterway has been toned down to 38,000 (by 1965) by a new study made by three University of Illinois geographers. Normal growth of the Chicago industrial complex is expected to add 270,000 jobs over the same period. Actually, the survey points out, a major impact of the Seaway may come indirectly - through competition which will act to create lower rates for land transport media.

No more passengers will ride Western Pacific freight-train cabooses on the "Inside Gateway" route between Keddie and Bieber. Passengers have been permitted to ride the caboose on certain trains—but only 145 have done so since 1953. The California PUC authorized discontinuance of applicable tariffs effective Oct. 26.

99¢ BOOK SALE

FALL INVENTORY CLEARANCE

- 1 Handbook of American Railroads, by R. G. Lewis. Data on 113 Class I railroads, history, equipment data, maps, train photos. Originally \$4.50. Now only 99¢.
- 2 Diesel-Electric Locomotive Handbook, 2 volumes. Comprehensive treatment of the modern diesel loog-motive, design, mechanical and electrical equipment, operation, maintenance and service, trouble-shooting, combustion and lubrication. For engineers, firemen, mechanics, apprentices. Bought separately originally cost \$5.50. Two-volume set complete, only 99c.
- 3 Roadway and Track, by Walter F. Rench. Now somewhat dated, this book which describes and illustrates methods of roadway and track maintenance still contains a wealth of important and valuable information. Regular catalog price is \$5.50. Now, for a limited time, 99e.
- 4 Routing and Misrouting of Freight, by Glenn L. Shinn. Learn how to simplify complex routing problems. Rights and obligations of shippers and carriers explained. Defines correct method of tender to obtain lowest published rate. Regular price \$4.75. Now 99¢.
- 5 On Engines in Britain and France, by P. Ransome-Wallis. Authentic, vivid, beautifully illustrated story of crack French and British trains. Detailed data on locomotive performance. 248 pp. 32 pp. of illustrations. Originally \$5.50. Now 99c.
- 6 ABC's of Air Brukes, by C. M. Drennan, Presents a clear explanation of train brake control, air brake fundamentals and a glossary of air brake terms. 256 pp. 200 illus. Published at \$4.75. Now special, limited-time price, 99c.
- Car Air Brakes, by C. M. Drennan. Presents an intensive, self-contained, course in car air brake devices, freight car brakes and passenger car brakes, 160 pp. 100 drawings, 41 photos, Originally \$4.75, Non 99c.
- 8 Locomotive Air Brakes, by C. M. Drennan. Covers the subject in four extraustive sections on locomotive devices, locomotive brake equipment, electro-pneumatic brake, and the speed-governor control. Originally \$6.75. Now 99e.
- 9 Simplified Curve and Switch Work, by Walter F. Rench. Presents a simplification of methods for solving curve and switch problems for trackmen. Regular list price \$4.50. Now only 99¢.
- 10 Track and Turnout Engineering, by C. M. Kurtz, A practical handbook for railroad track engineers, transitmen and design draftsmen for the laying out of railroad turnouts and crossings, List price \$5.50, Now only 99c.
- 11 Diesel-Electrics—How to Keep 'Em Rolling. Presents the electrical fundamentals of diesel-electric locomotives in plain, non-technical language easily understood by any practical shop or maintenance man. For a limited time only, get your copy for 99e.

ORDER PROMPTLY: DON'T BE DISAPPOINTED! A few weeks ago—after we hought out the railroad book inventory of British Book Centre—we offered those fine hooks at special low prices in an advertisement very much like this one. The books were sold out in a week! We have what appears to us to be ample quantities of the books advertised here—but don't wait. Get your order in the mail quickly. At these low clearance prices you can fill in your professional library at little cost.

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Unity Is Vital on Rules Issue

The proposals the railroads made last week to the operating unions, for modernizing the working rules in train and engine service, constitute the most comprehensive program the industry has ever undertaken to adapt itself to changed conditions. (RA, Nov. 2, p. 16.)

Adaptation to change is the pr

Adaptation to change is the price all living beings—and all organizations—must pay to survive. At one time the dominant animals on earth were giant reptiles. Climate and vegetation changed. Smaller and smarter animals appeared. The big lizards didn't change. They vanished.

Technologically, the railroads are still, by far, the most economical method of land transportation for all freight traffic (except very short and very light hauls); and for a substantial part of

passenger movement.

But the railroads are not getting anything like the proportion of total traffic they could handle more economically than other forms of transportation. The reason is that, so far, railroads have not been able to adapt themselves to radically changed environment.

The handicaps to change that confront the railroads are all "institutional"—they are not economic or technological. What "institutional" handicaps mean is that laws, regulations and traditions are forcing the railroads to operate more in accordance with competitive conditions as they were in 1910, than as they are in 1959. These moss-grown "institutional" handicaps fall into four categories, as follows:

Institutional Handicap No. 1—Regulation—Railroads are regulated even more restrictively in 1959 than they were in 1910—and newer forms of transportation are regulated much less severely or not at all. To survive and prosper, railroads' regulation must be strictly equalized with that of all other transportation, including private transportation.

Institutional Handicap No. 2—Taxation—Railroads are the only form of transportation subjected to ad valorem taxation on fixed property. To survive and prosper, railroads must have equality with other forms of transportation in taxation of their plant.

Institutional Handicap No. 3—Capital Supply

—To secure funds for renewal and improvement
of their fixed plant, railroads must depend upon
private investors and upon their net earnings.

Other forms of transportation get practically unlimited supplies of fixed plant capital from the public treasury. For railroads to survive and prosper, as private enterprise, it is essential that private enterprise principles (self-support, rather than support by taxpayers) be extended to govern the supply of capital to other forms of transportation. (While this transition is being effected, "stop-gap" expedients, such as accelerated depreciation and exemption from income taxation of reinvested earnings, are essential.)

Institutional Handicap No. 4—Antiquated Working Rules—Whatever the leaders of the railway operating brotherhoods may say for public consumption in defense of present working rules, these gentlemen know, and all other informed railroaders know, that these rules are as out-of-date as a horsedrawn buggy. To survive and prosper, railroads must have working rules no more onerous than those obtaining in competing forms of transportation.

Of the four kinds of institutional handicaps which are bogging down railroad prosperity and growth, it is No. 4—Antiquated Working Rules, which deserves top priority within the railroad industry. This is because this particular handicap can be removed by railroad men themselves—management and unions. Management's position in seeking to moderate these suicidal rules is necessary to protect the industry's traffic and future employment—hence is "pro-labor."

It is, of course, perfectly possible for informed railroad men to have differing private opinions as to the relative importance of the many proposed rules changes. But it is not individual railroad people who have the responsibility for negotiating these rules changes to a successful conclusion. That responsibility has been laid upon managements' conference committees in the three regions. These negotiators cannot do their job effectively without the loyal support of every informed railroader for the program as a whole.

Are you, Mr. Railroader, a part of "the railroad problem," or a part of the answer to that problem? Your understanding of, and attitude toward, this working rules issue provides the answer to that question.

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